

FIG.1

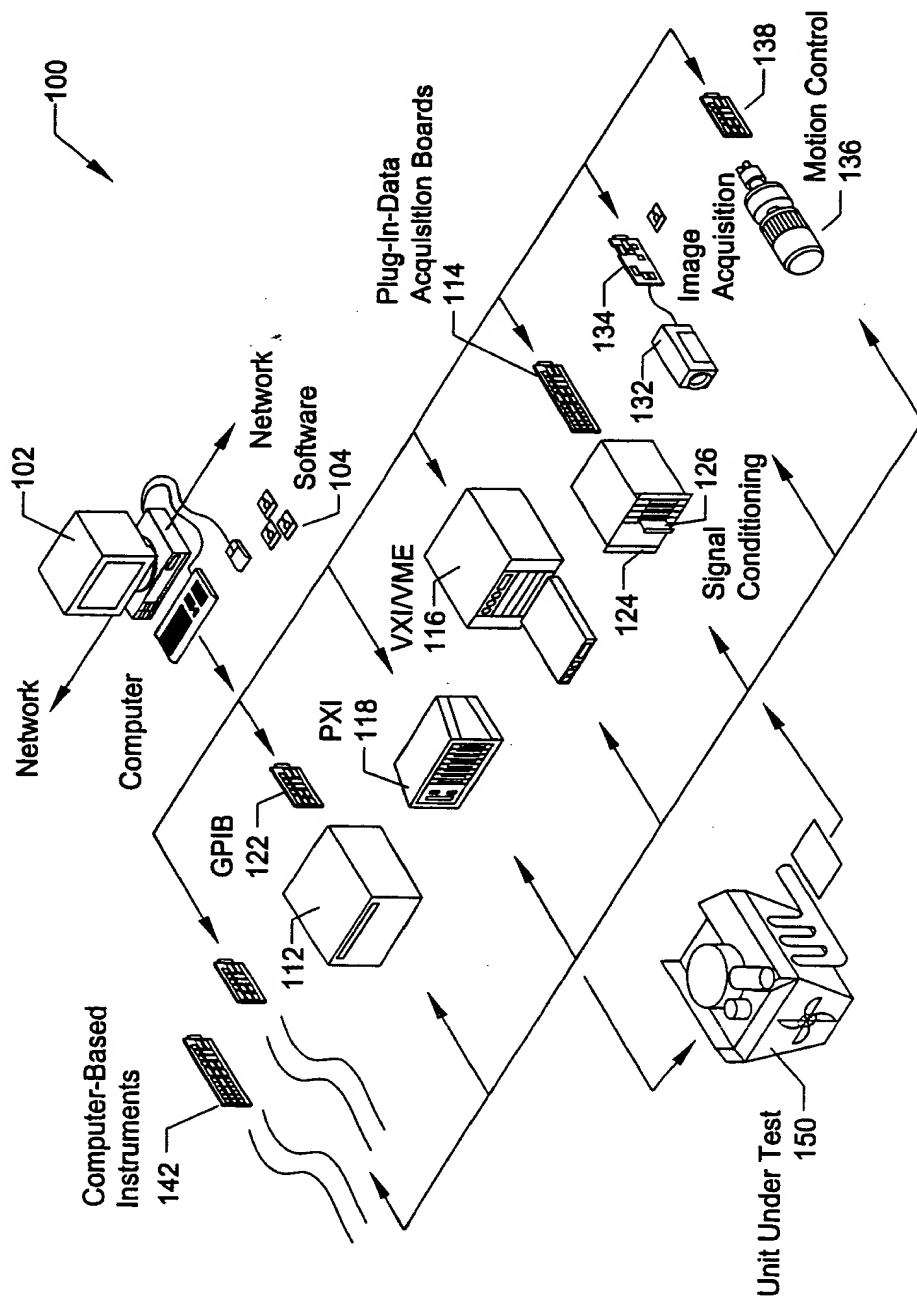


FIG. 2A

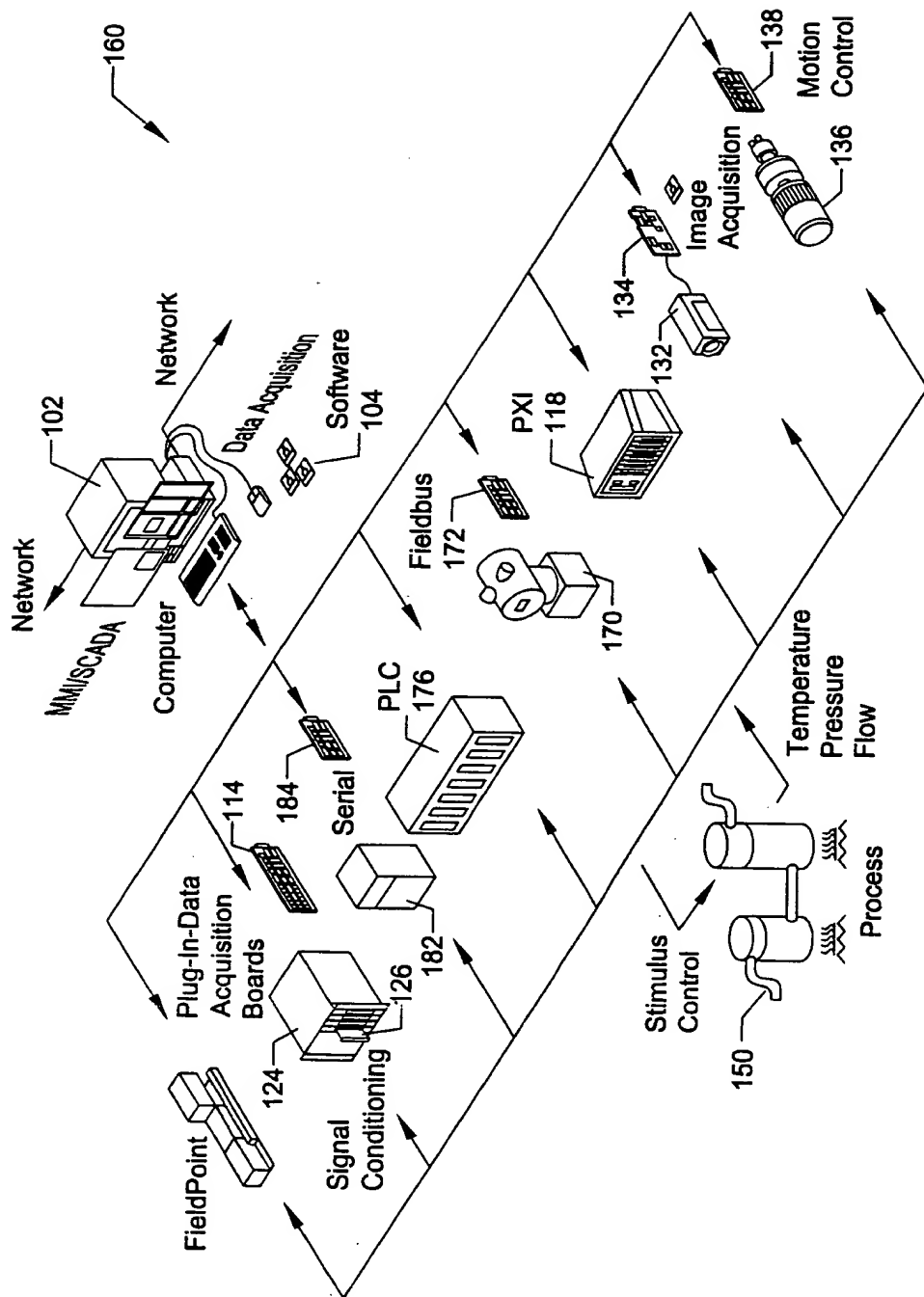


FIG. 2B

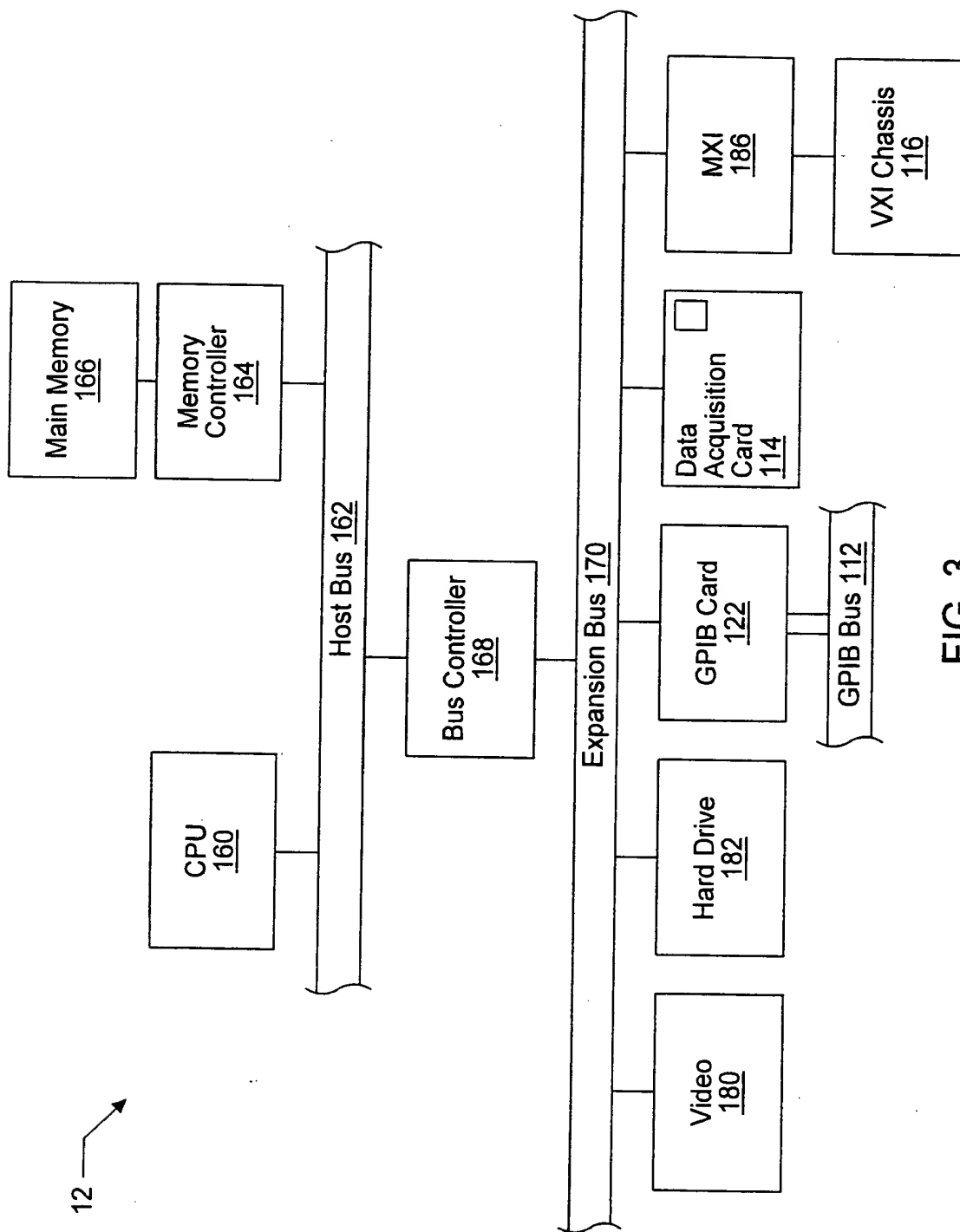


FIG. 3



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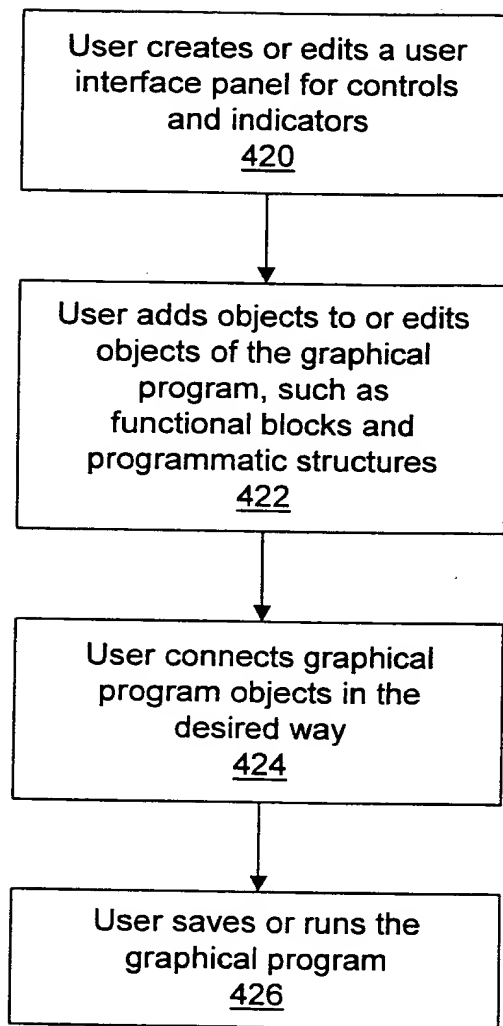


FIG. 4
(PRIOR ART)

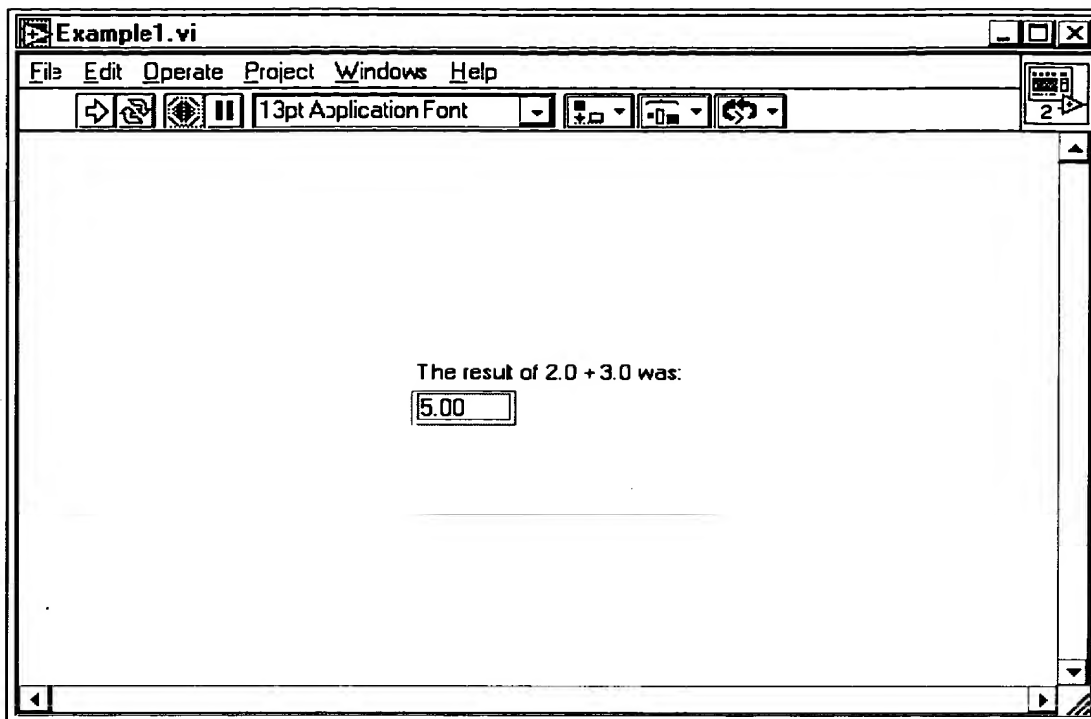


FIG. 5A
(PRIOR ART)

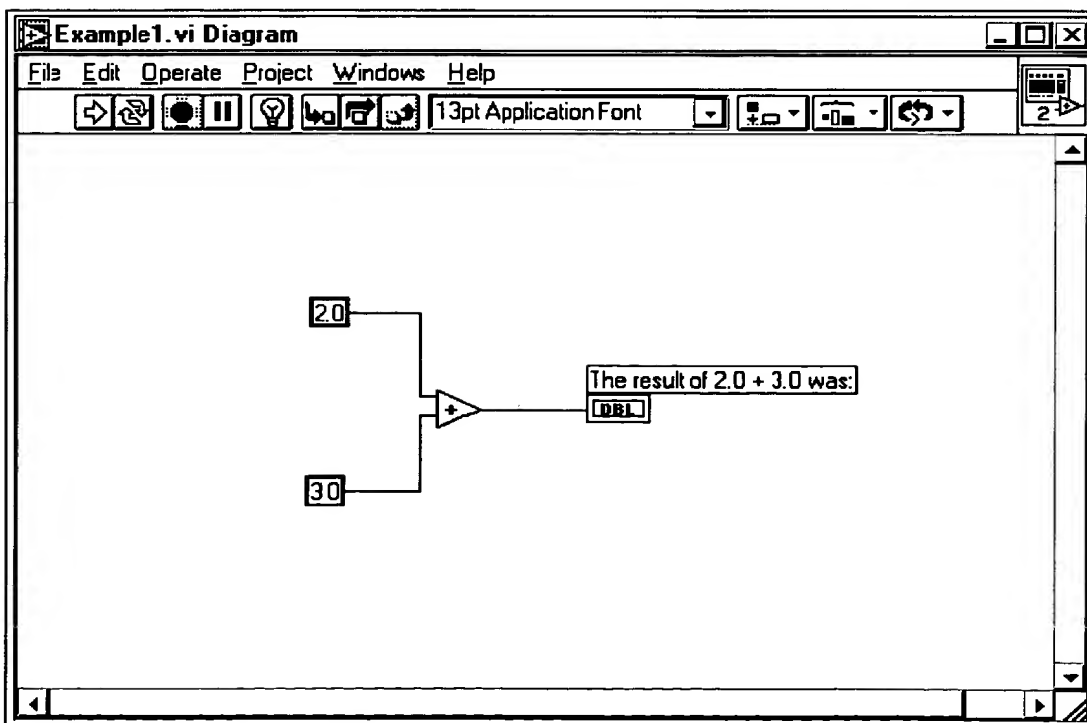


FIG. 5B
(PRIOR ART)

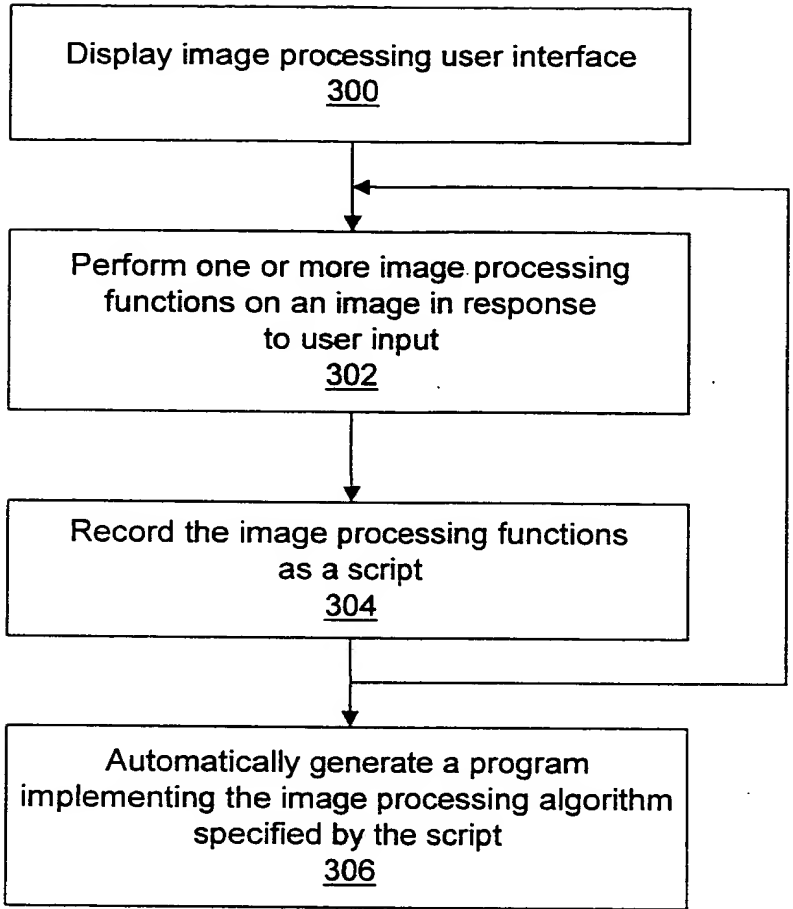


FIG. 6

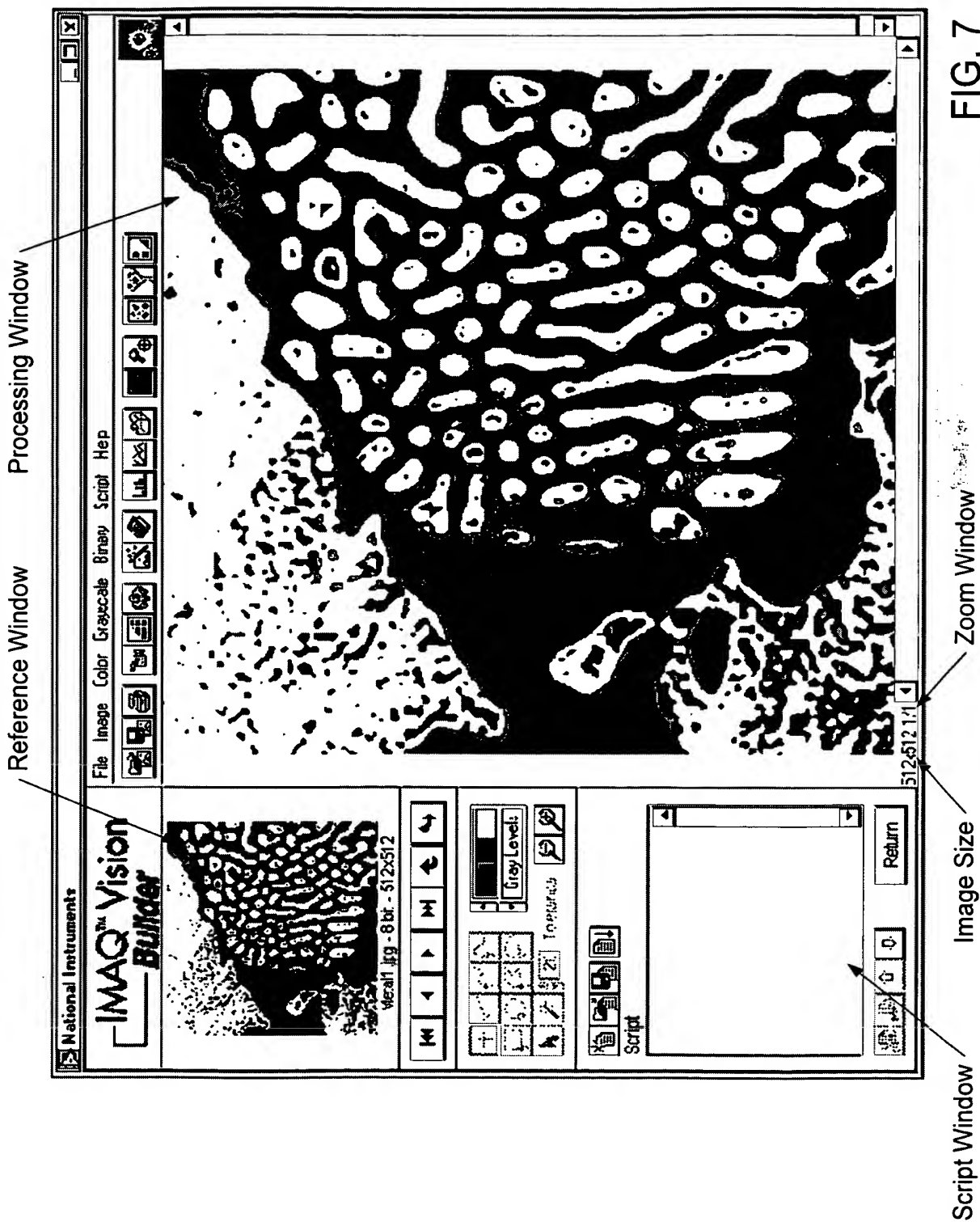


FIG. 7

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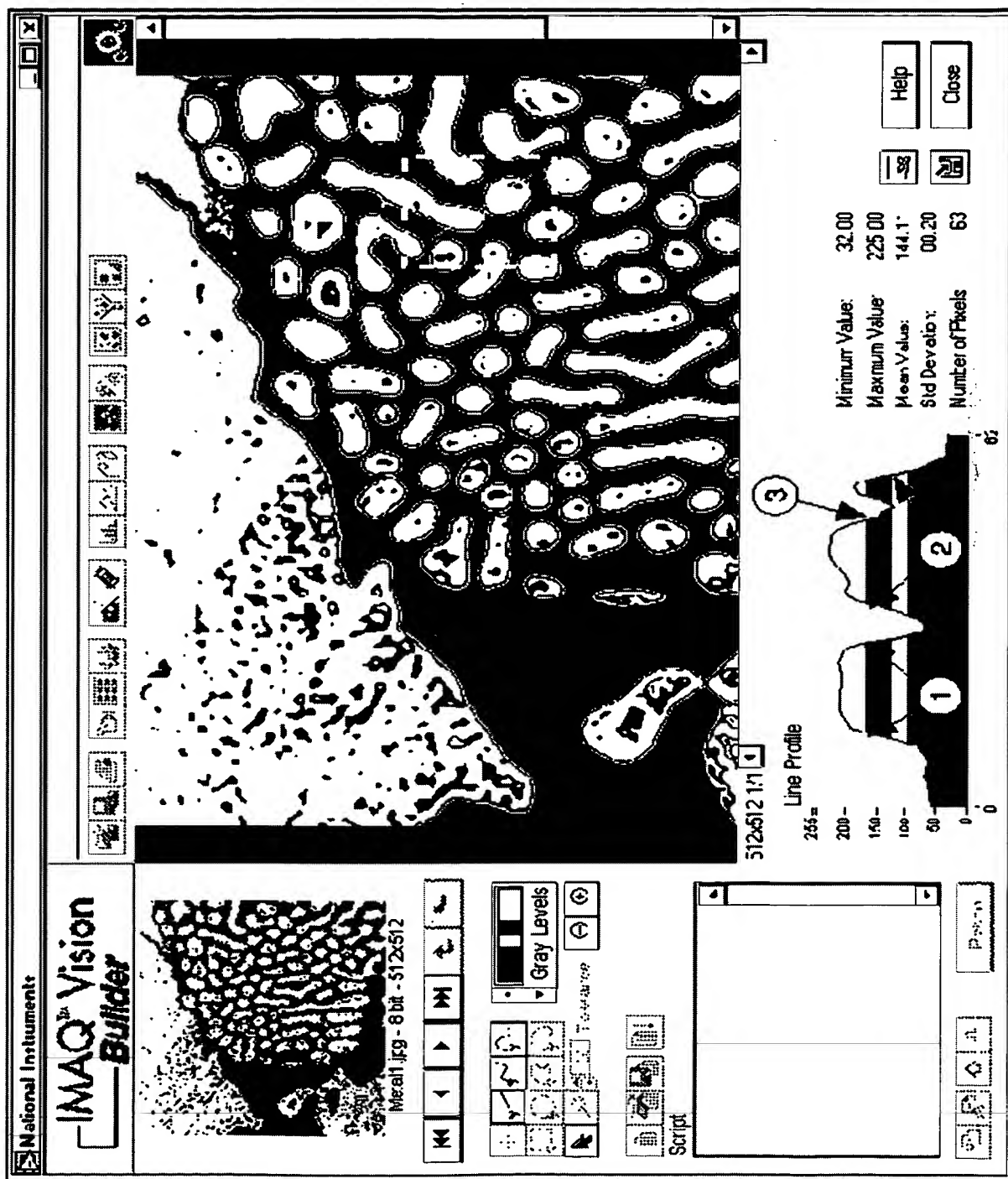


FIG. 8

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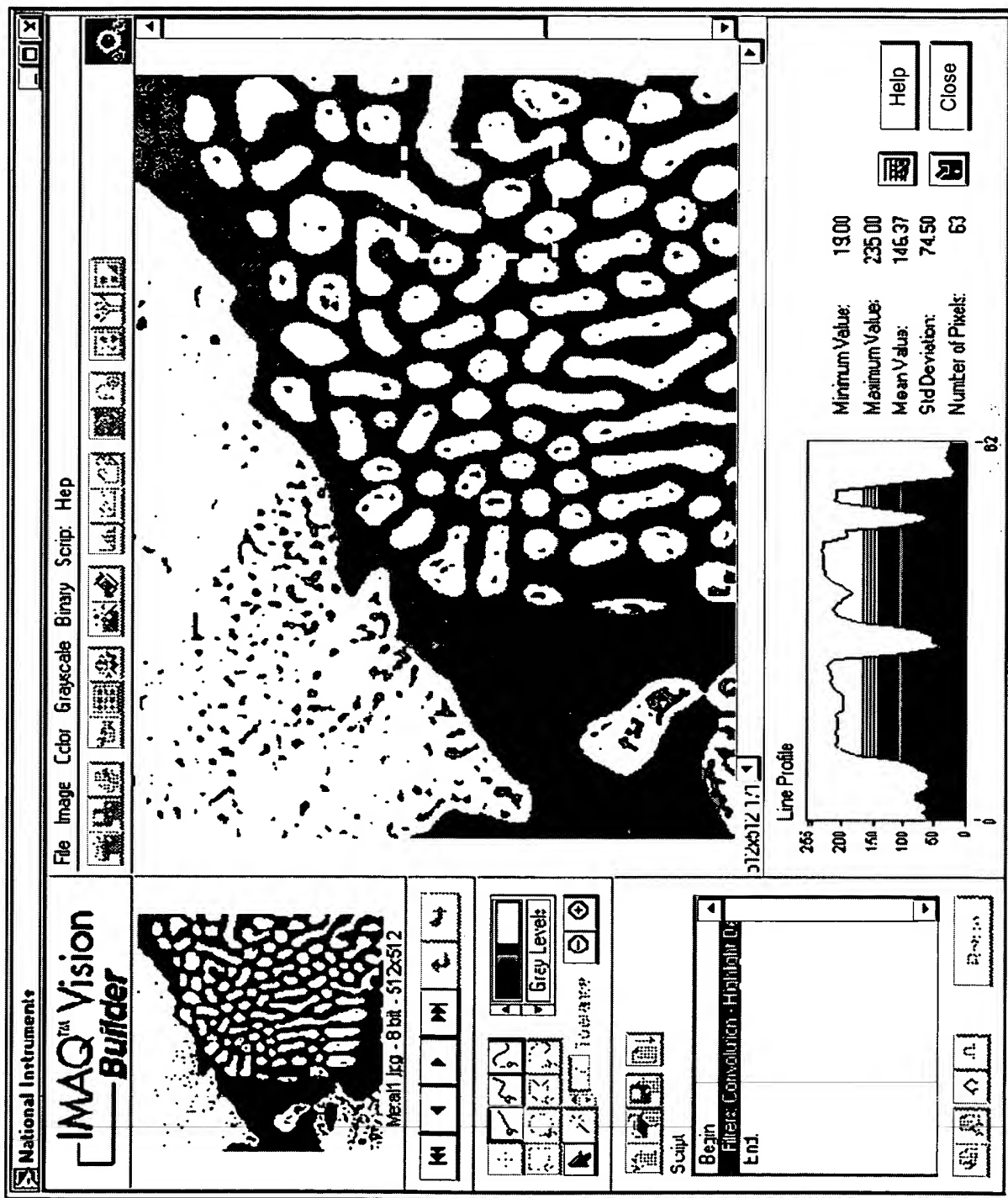


FIG. 9

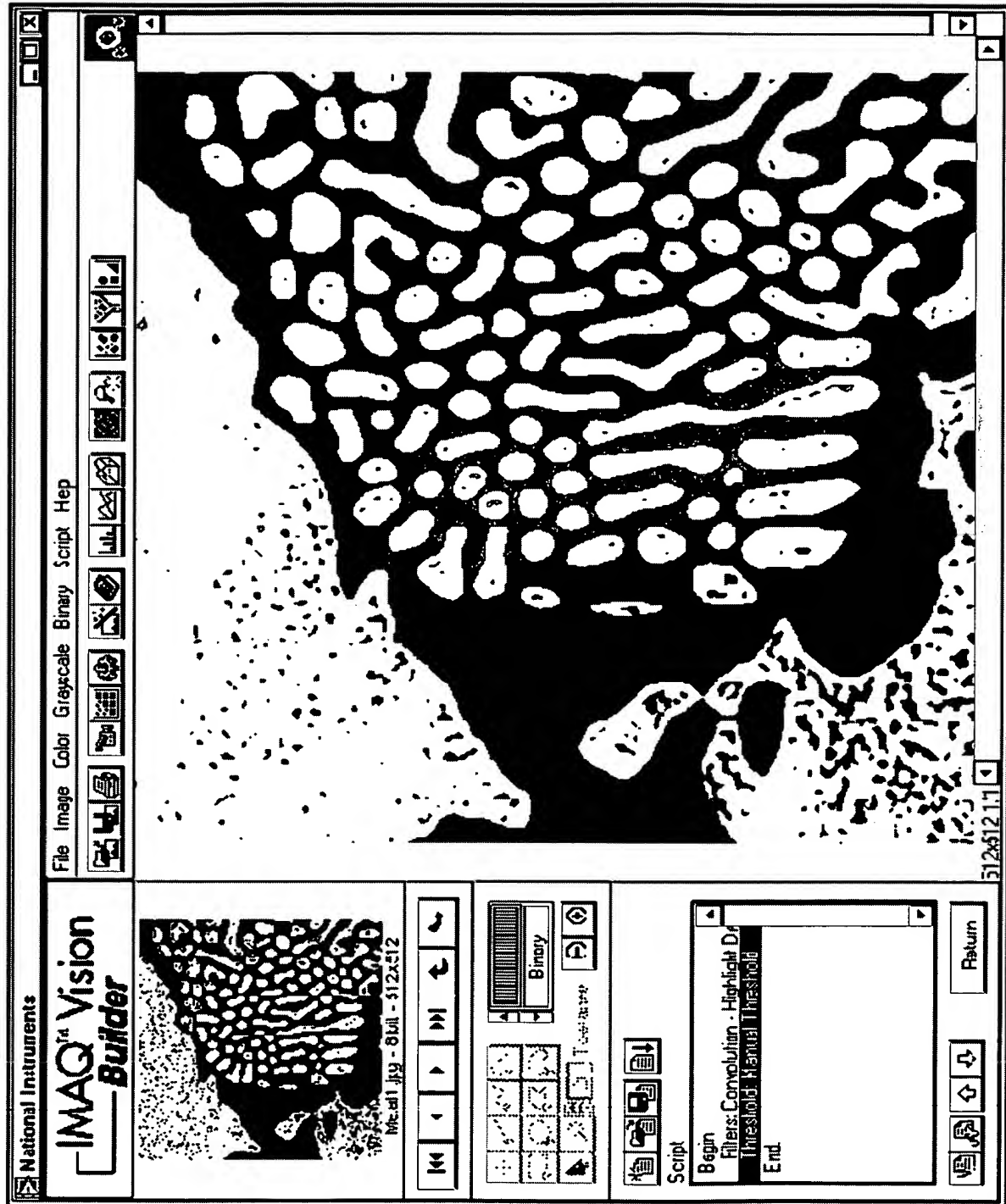


FIG. 10

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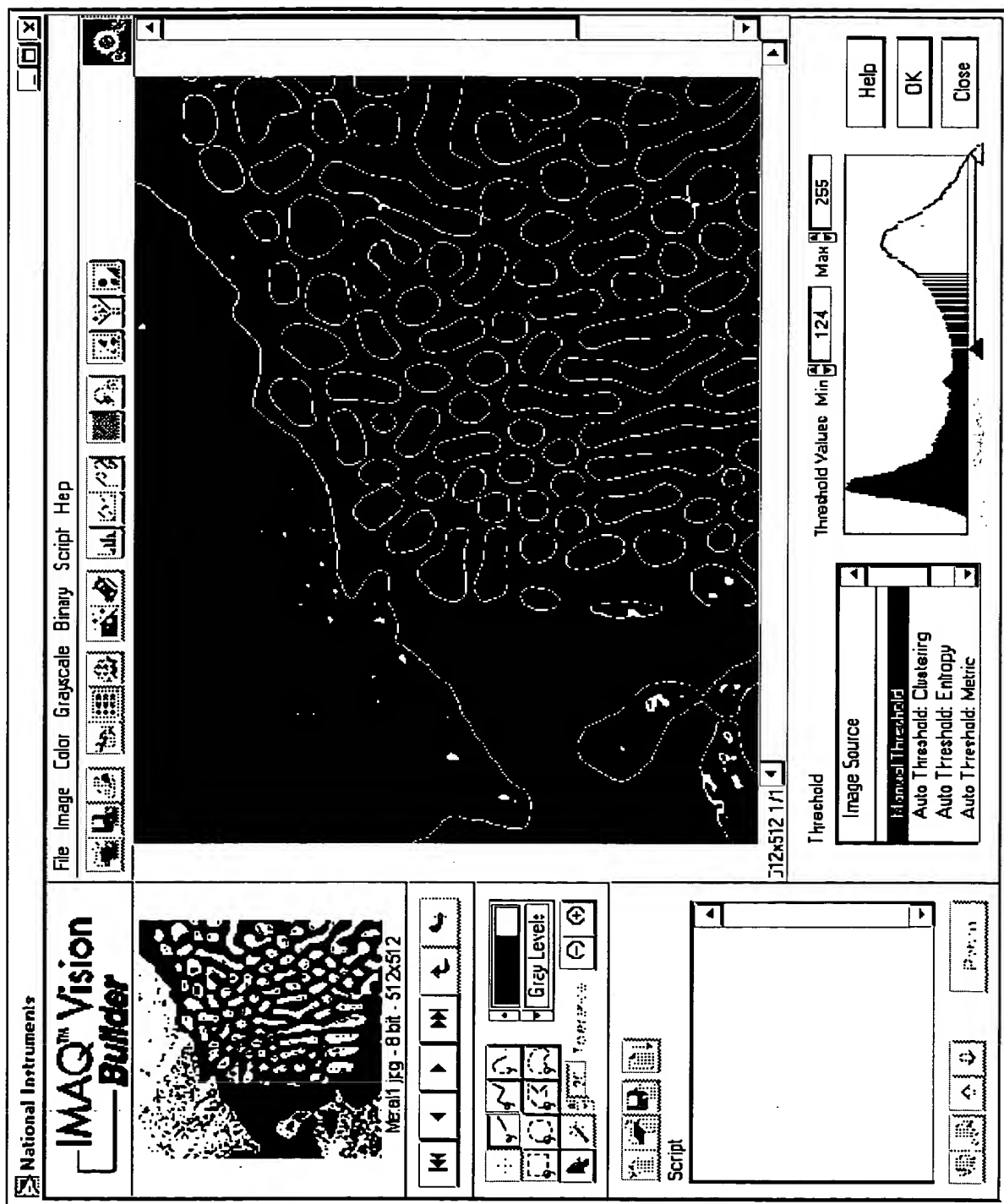


FIG. 11

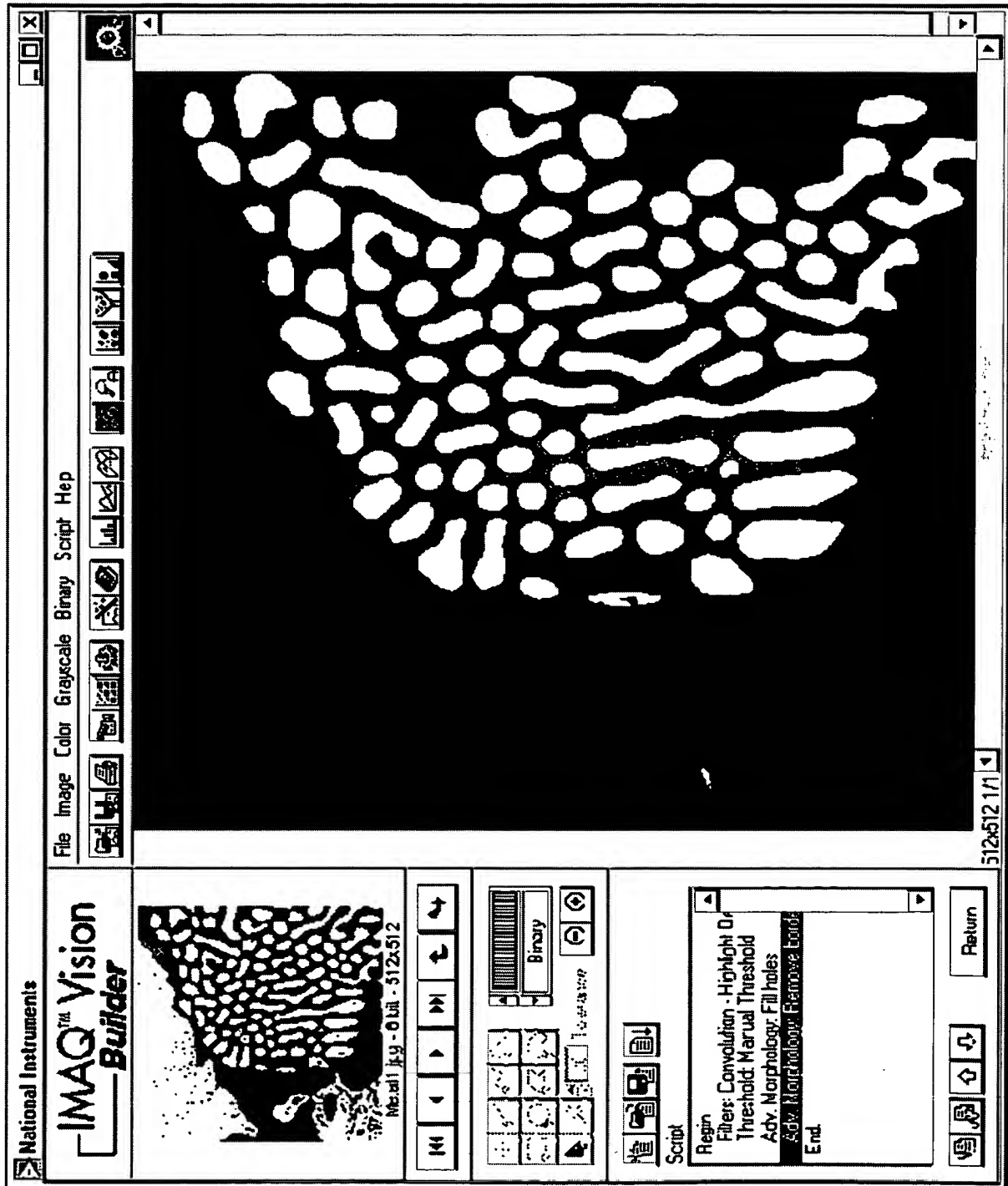


FIG. 12

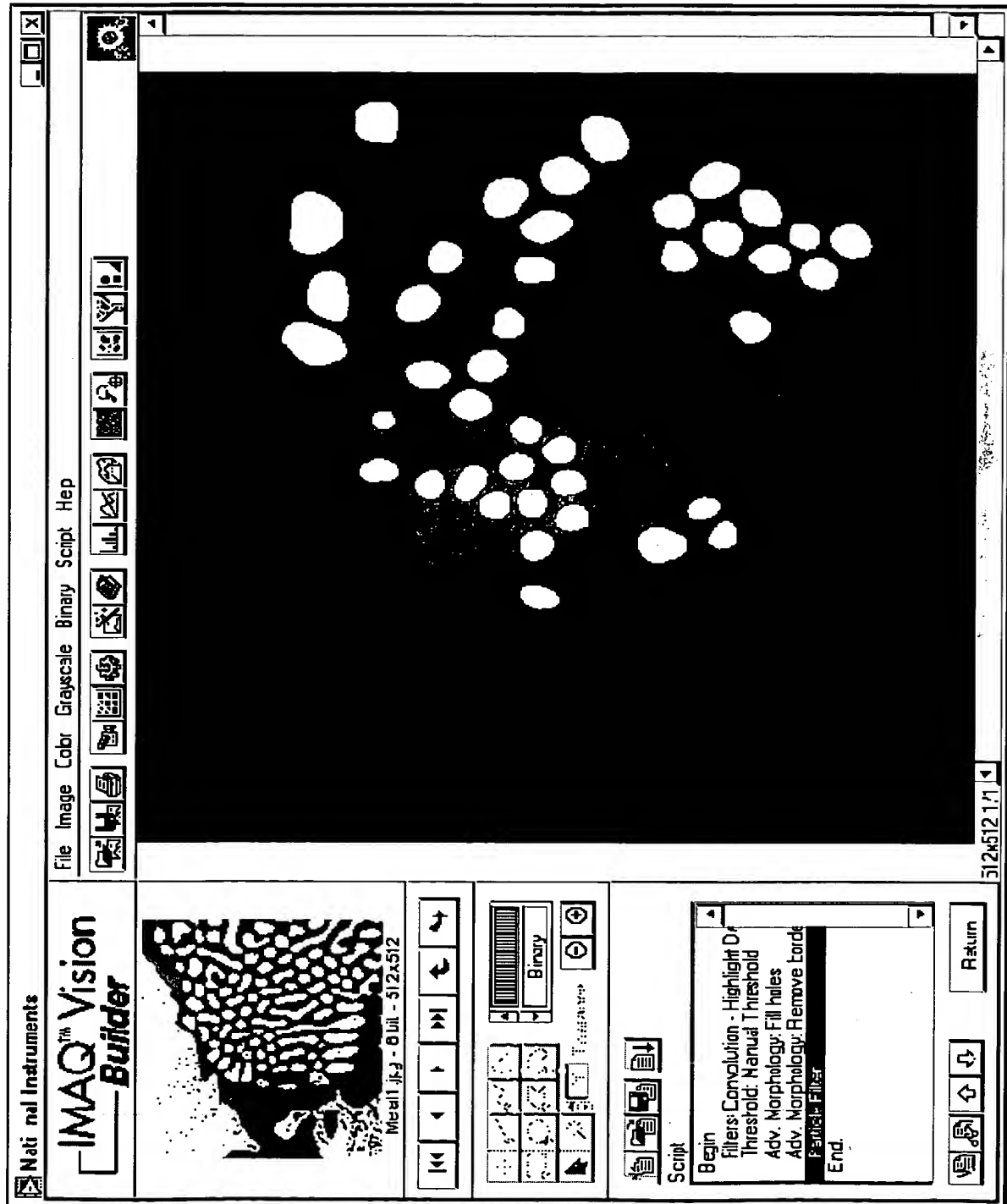
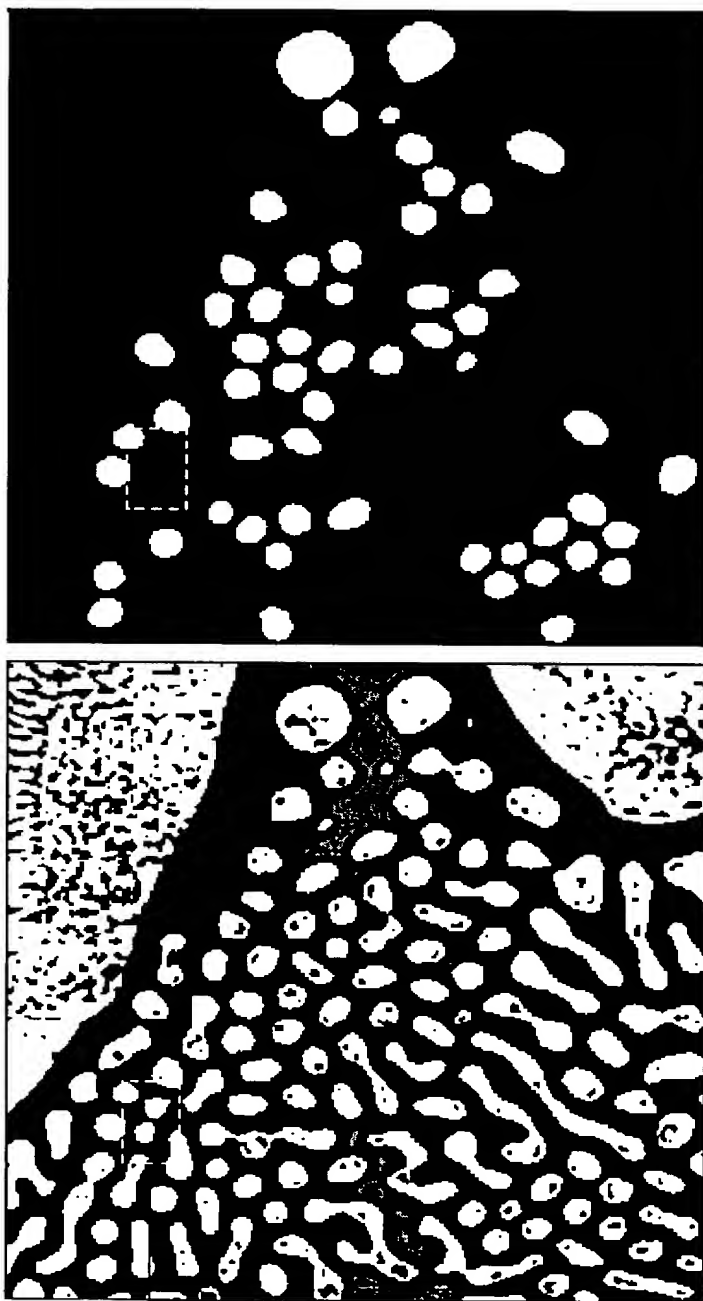


FIG. 13



Original Image (Metal3.jpg)

Image after Processing

FIG. 14



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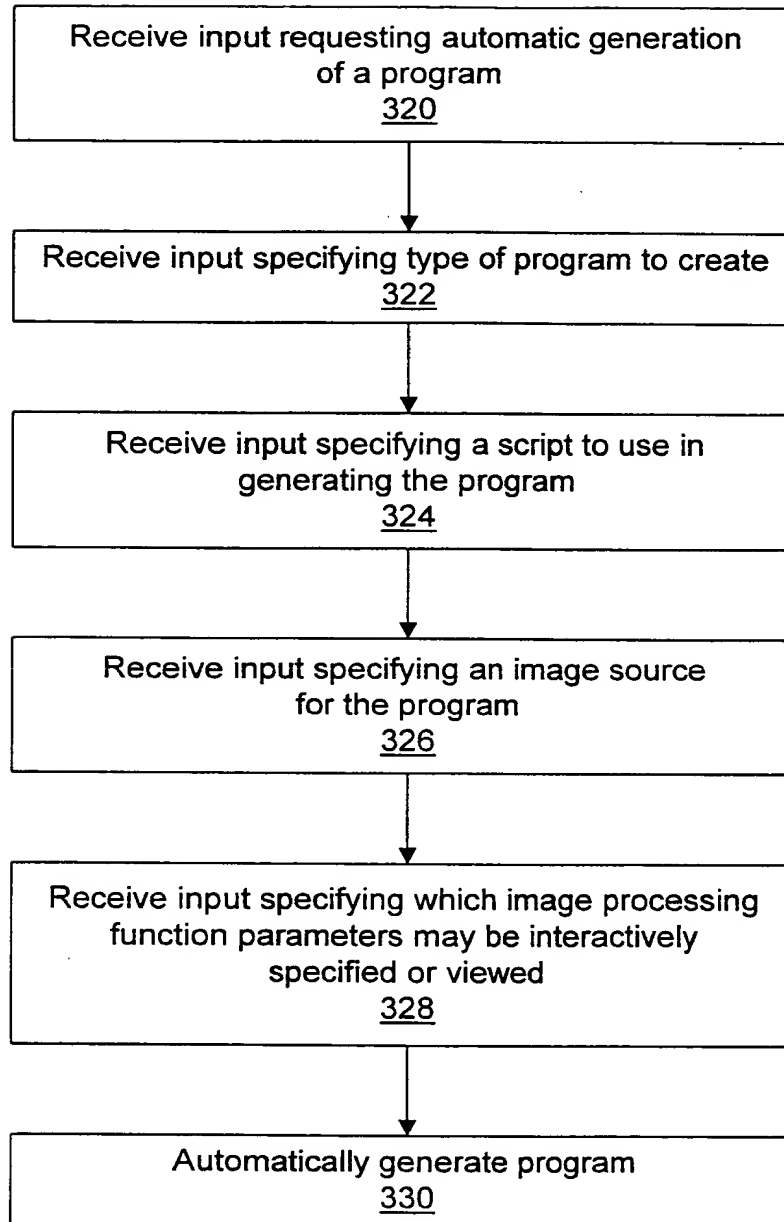


FIG. 15



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LabVIEW
LabWindows/CVI
Microsoft Visual Basic
Microsoft Visual C++
Builder File

Name: Project

Location: E:\...\Solutions

Would you like to generate a project or a single file

☒ Whole project
☐ One file

OK Cancel

FIG. 16

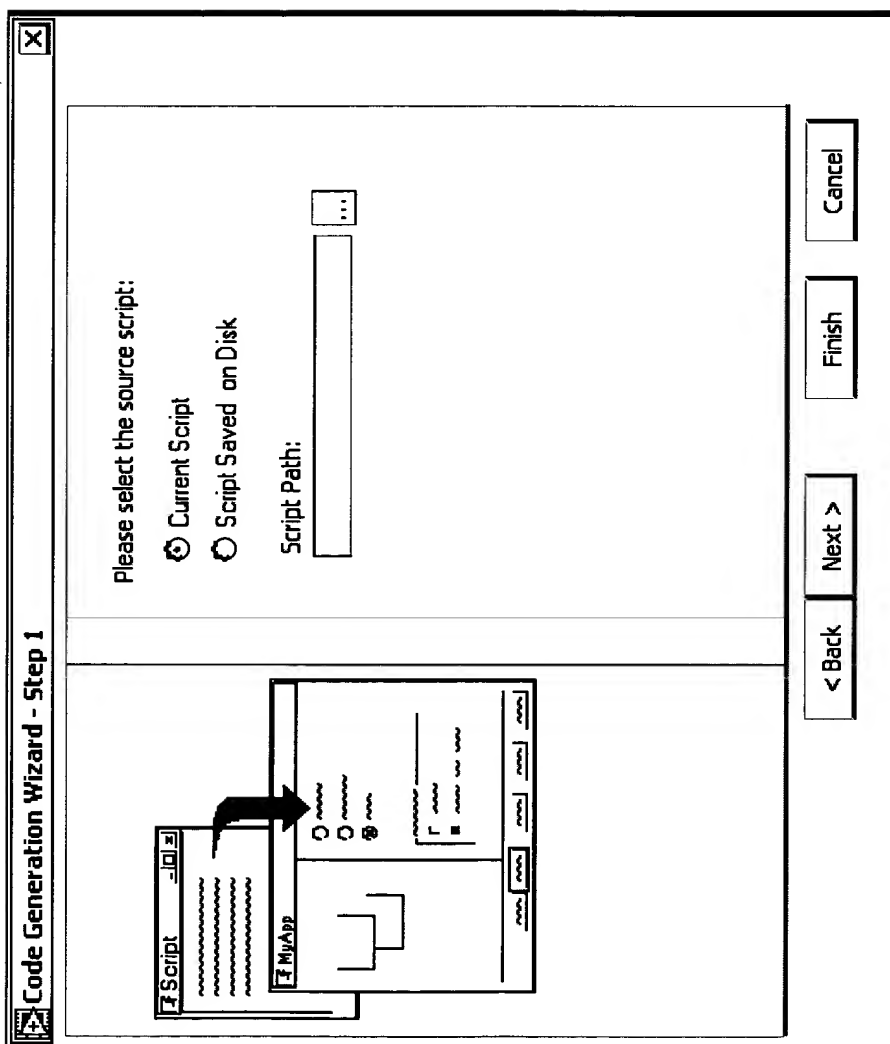


FIG. 17

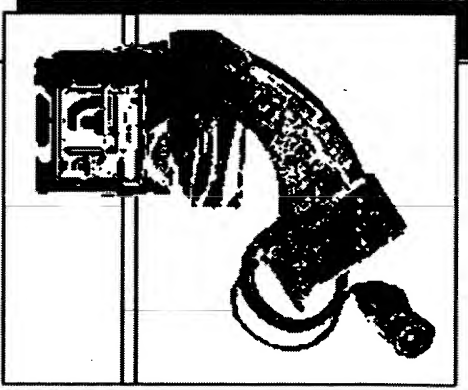
Code Generation Wizard - Step 2

Please select the image source:

☒ Image file
☐ IMAQ frame grabber
☐ None

Acquisition type

☒ Snap
☐ Triggered acquisition



< Back Next > Finish Cancel

FIG. 18

Code Generation Wizard - Step 3

Please select which parameter you want to be editable or hardcoded

Inputs	Outputs
Step 1 <input checked="" type="checkbox"/> Image Src Kernel Step 2 <input checked="" type="checkbox"/> Range Step 3 Step 4 Step 5 Keep Particles Selection Values	Step 5 <input checked="" type="checkbox"/> Complex Reports <input checked="" type="checkbox"/> Number of particles

The parameters that are checked will be shown on the Front Panel for editing or viewing.

< Back Next > Finish Cancel

FIG. 19

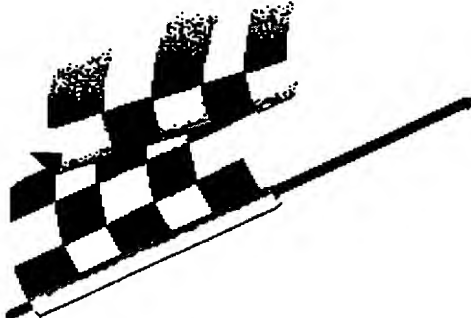


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Code Generation Wizard - Step 4

IVB Wizard creates the following files for you:

File name:	Summary
<input type="text"/>	<input type="text"/>



< Back Next > Finish Cancel

FIG. 20



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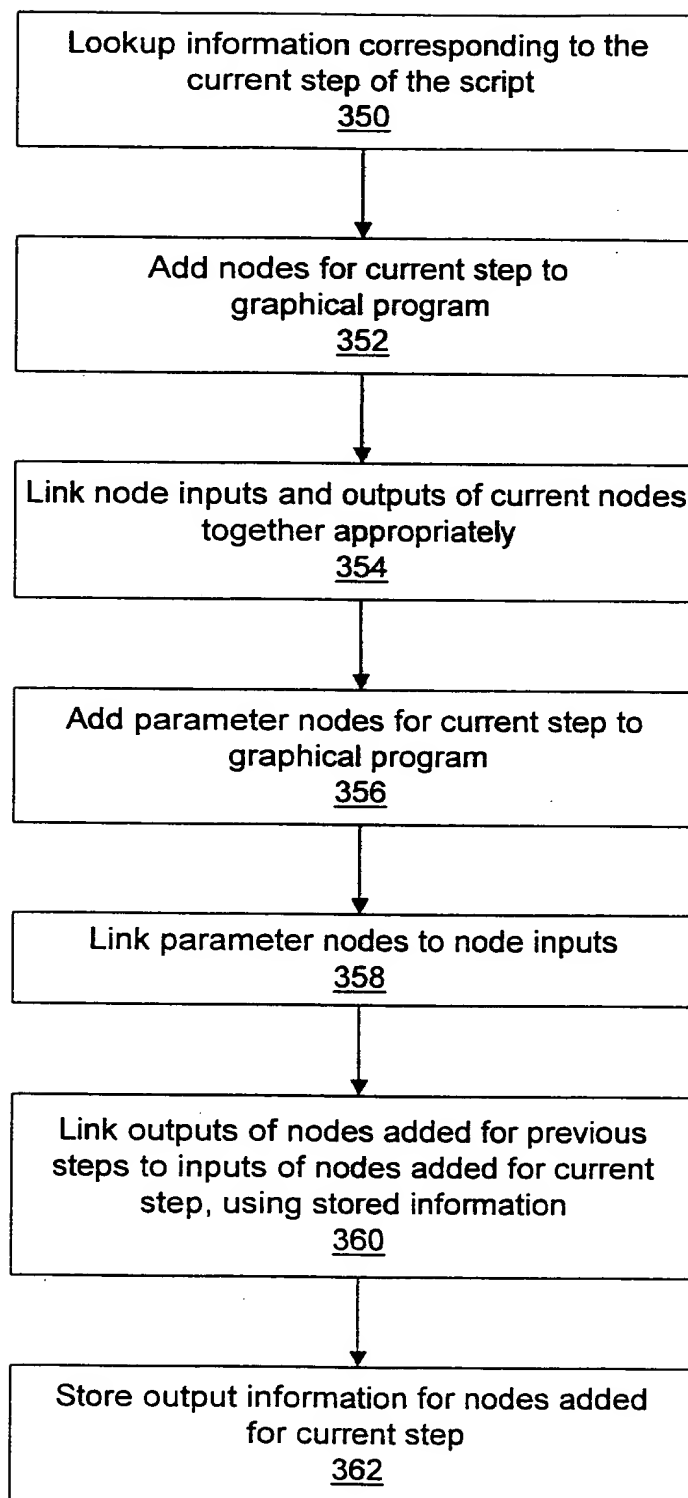
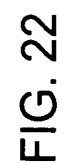
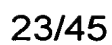
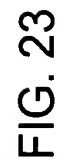
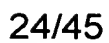


FIG. 21







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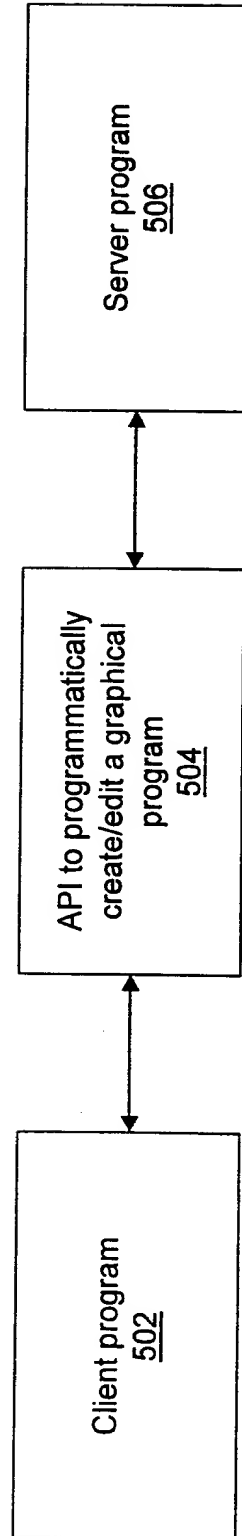


FIG. 24

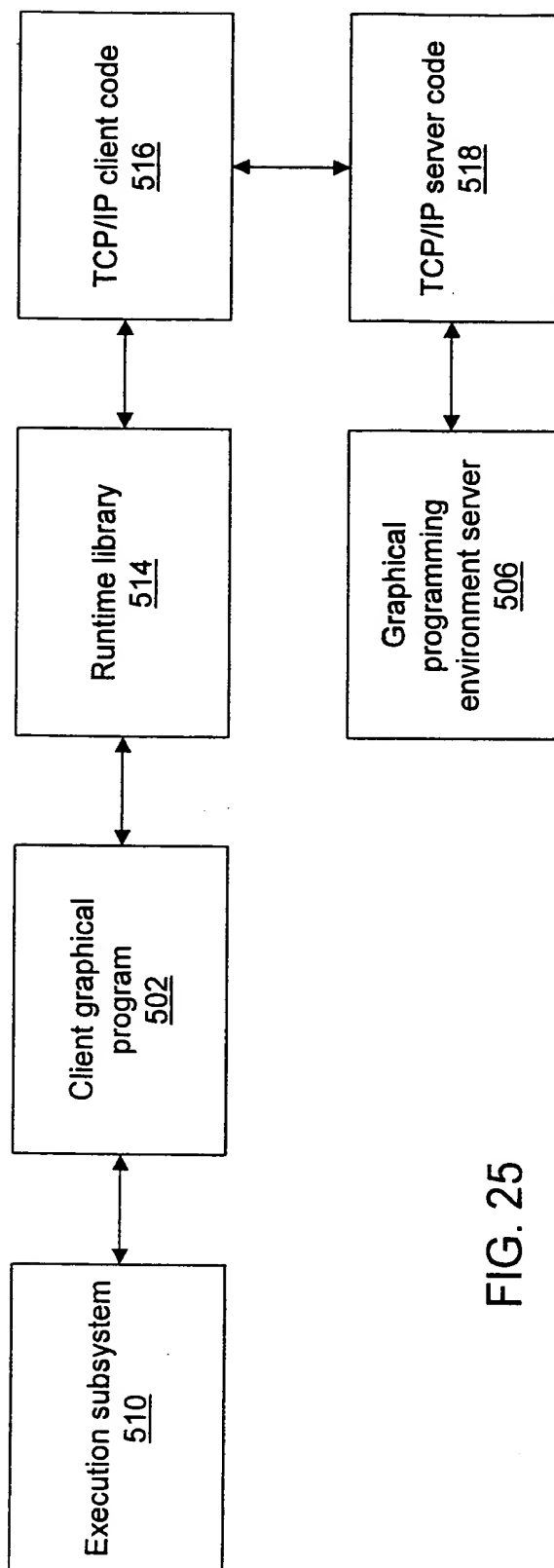


FIG. 25

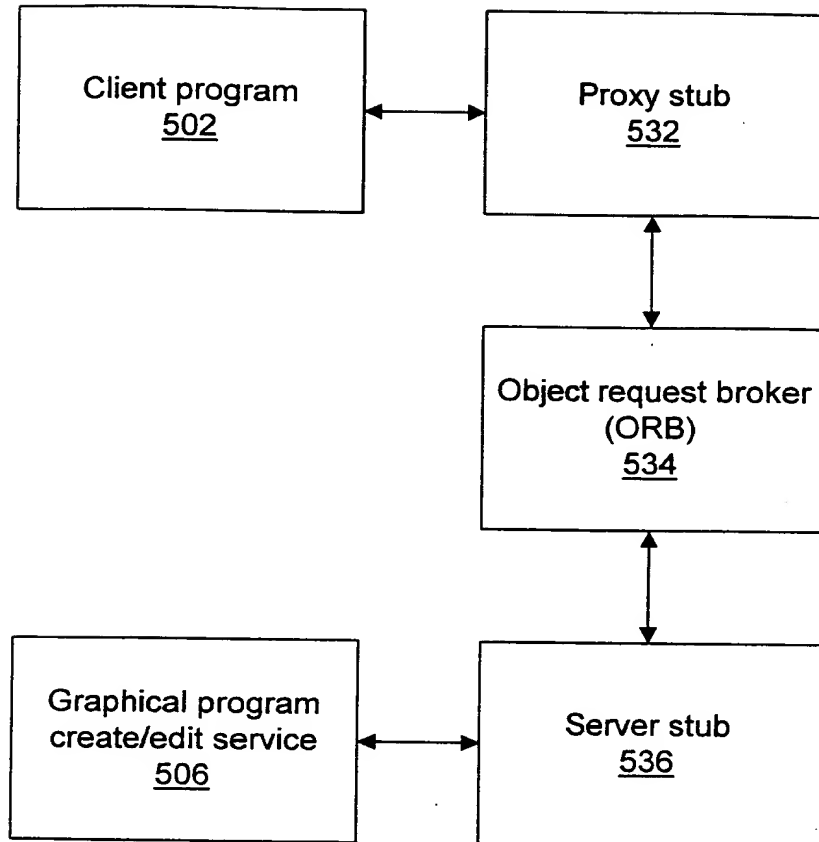


FIG. 26

Open Application Reference Node

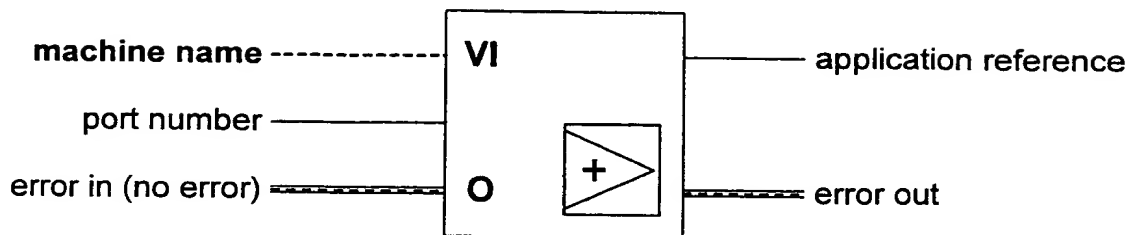


FIG. 27

Open VI Reference Node

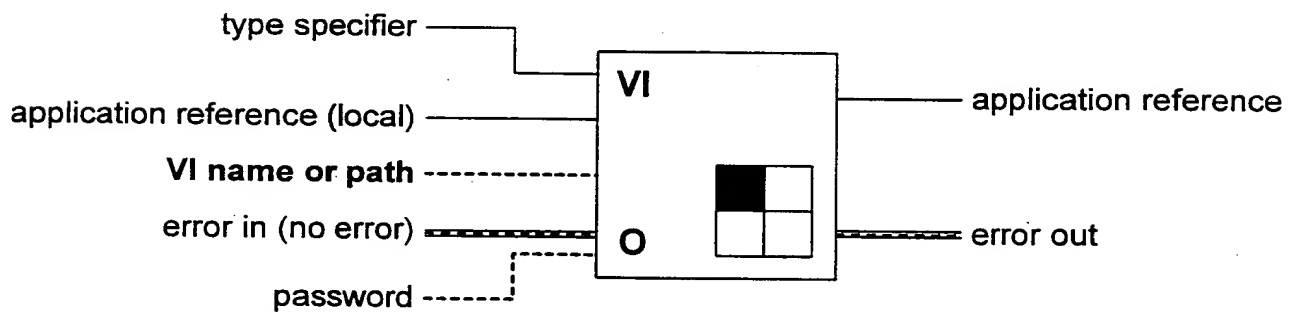


FIG. 28

New VI Reference Node

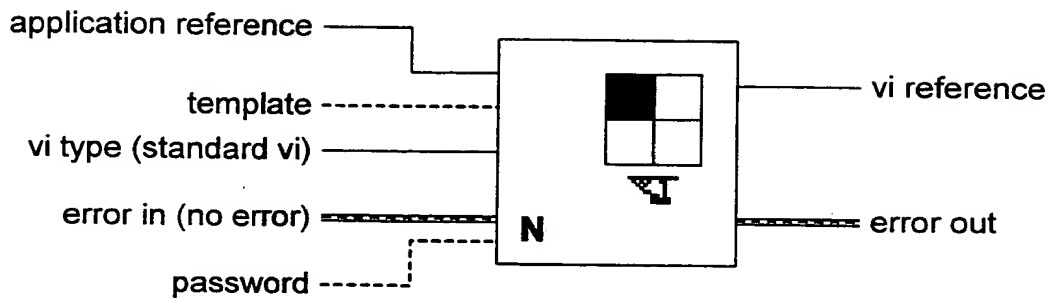


FIG. 29

Open VI Object Reference Node

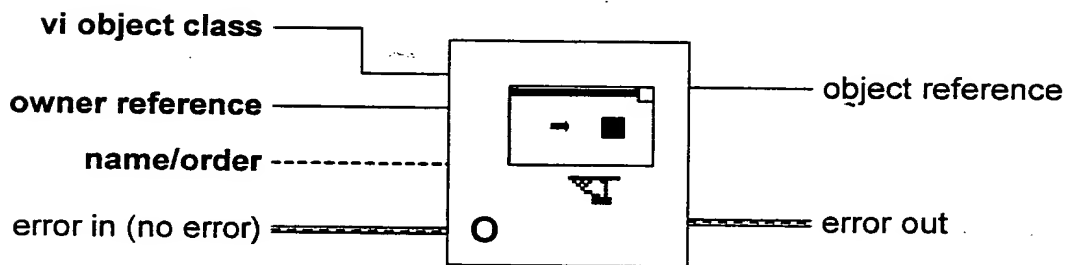


FIG. 30

New VI Object Reference Node

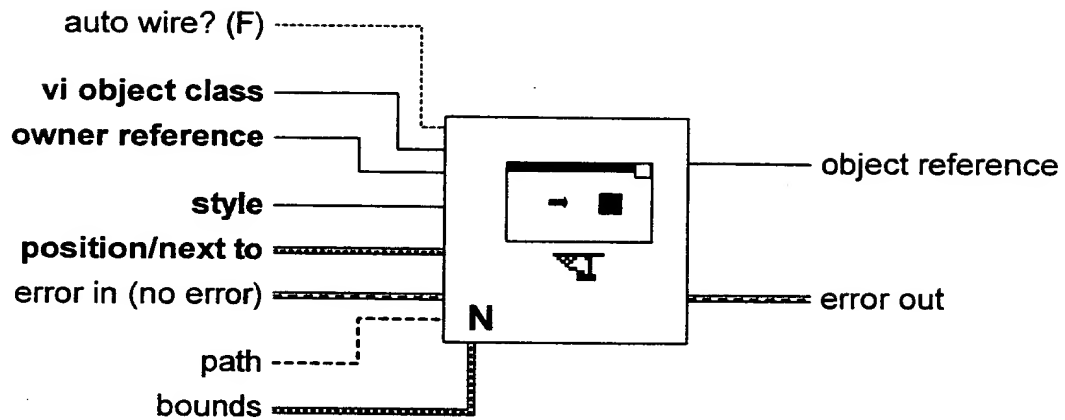


FIG. 31

Upcast Reference Node

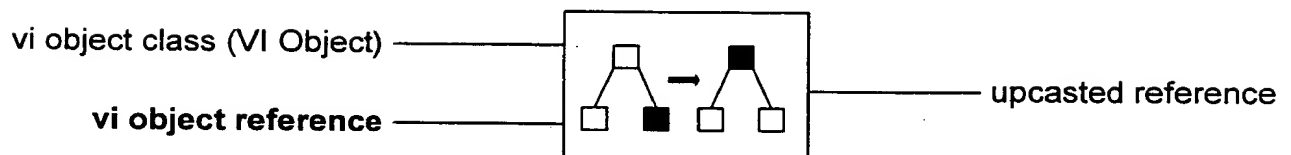


FIG. 32

Downcast Reference Node

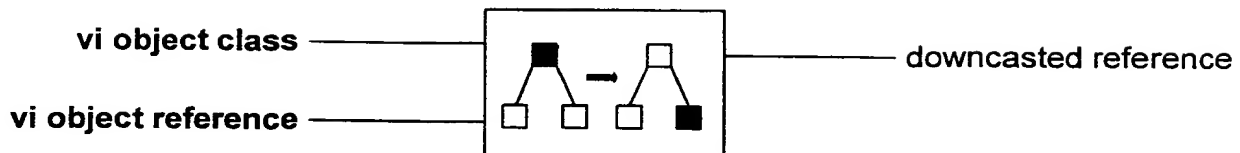


FIG. 33

Close Application or VI Reference Node

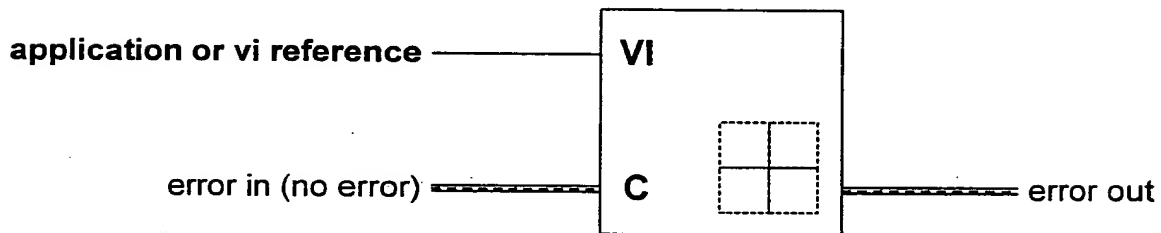


FIG. 34



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Call By Reference Node

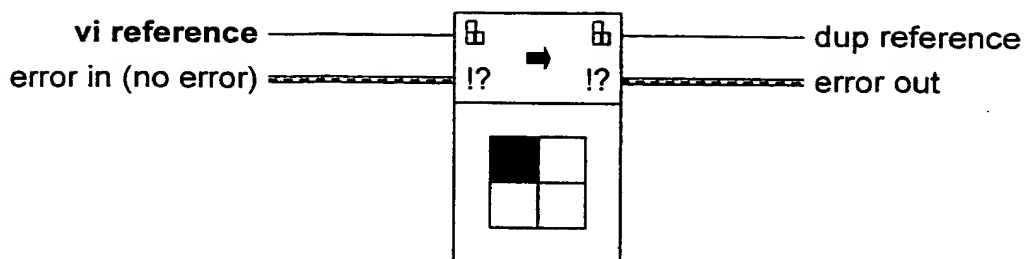


FIG. 35

Property Node

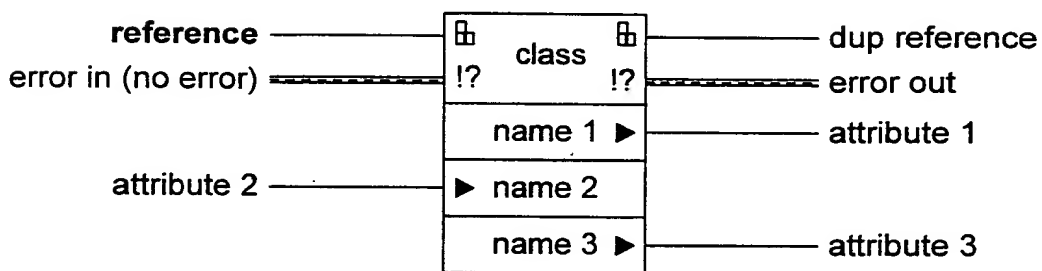


FIG. 36

Invoke Node

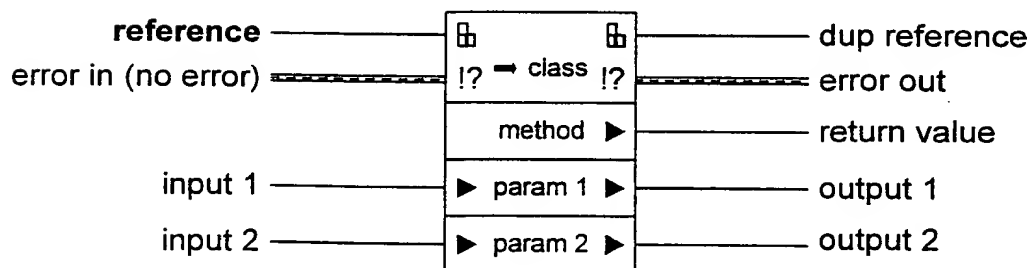


FIG. 37



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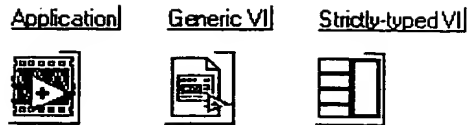


FIG. 38

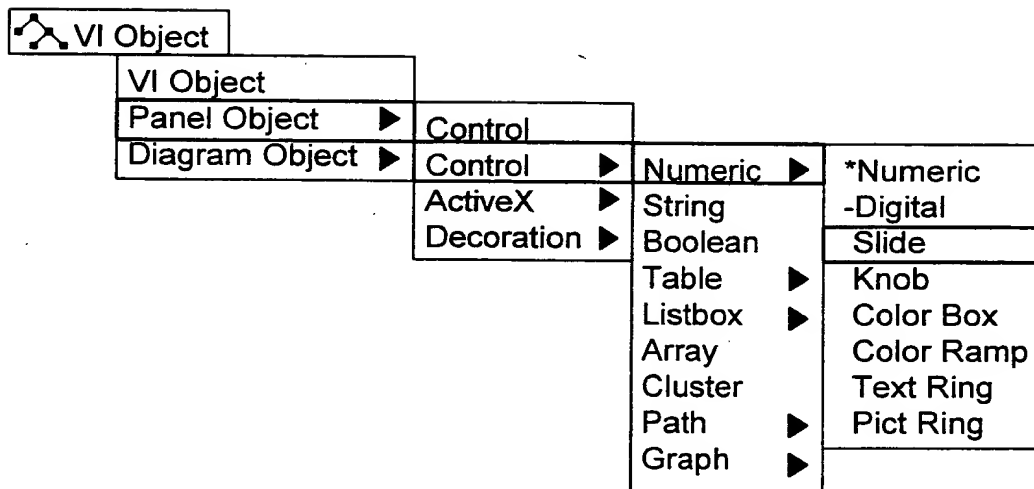


FIG. 39

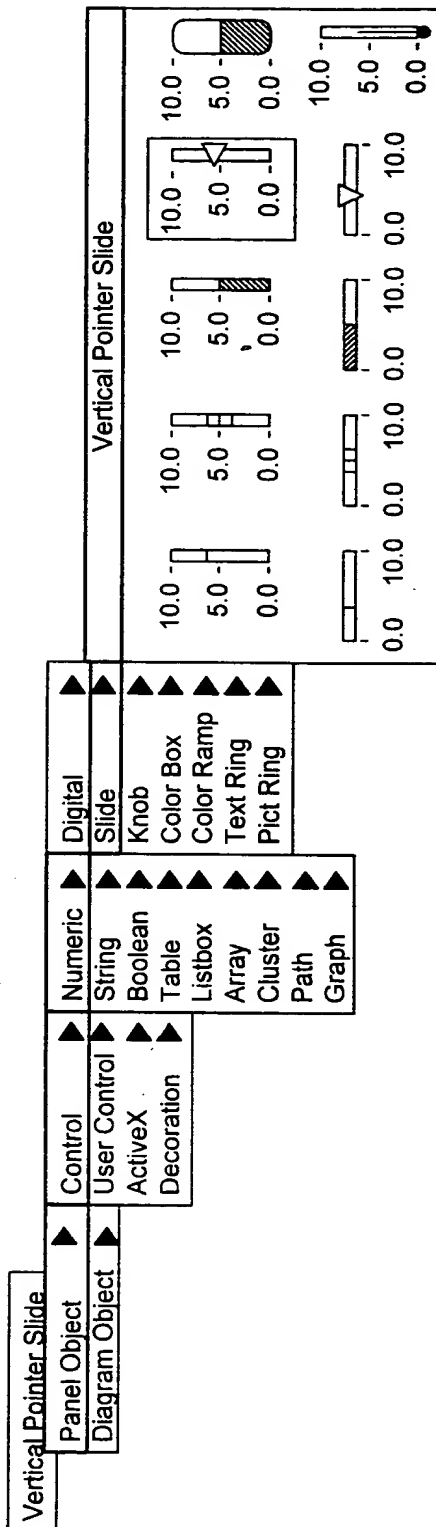


FIG. 40

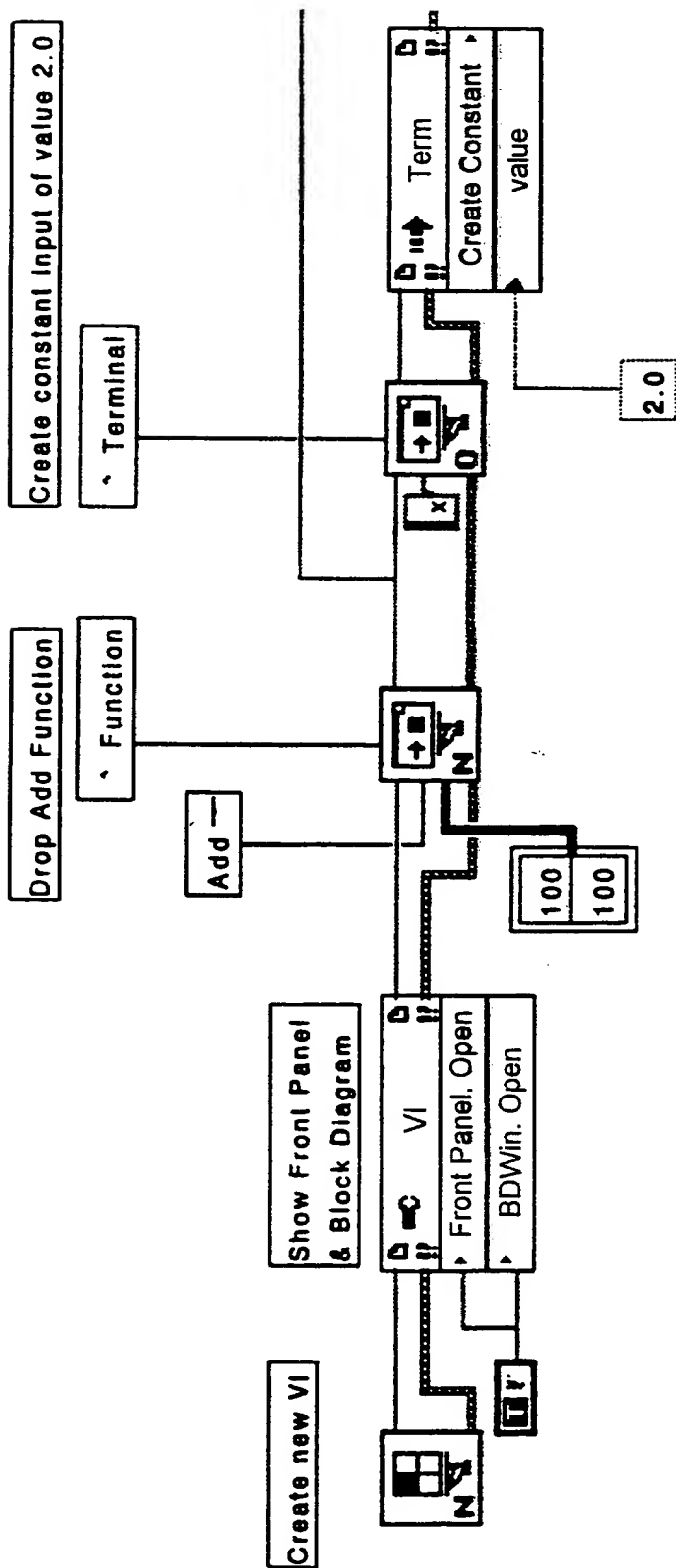


FIG. 41

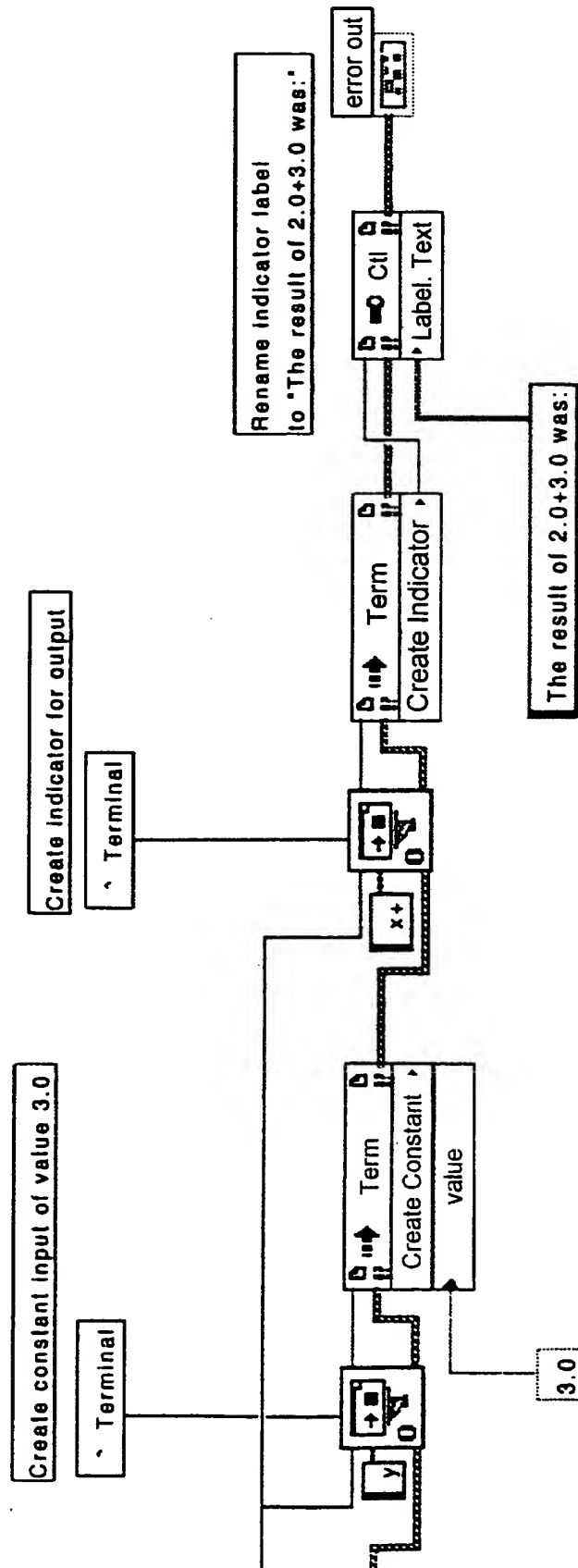


FIG. 41
(Continued)

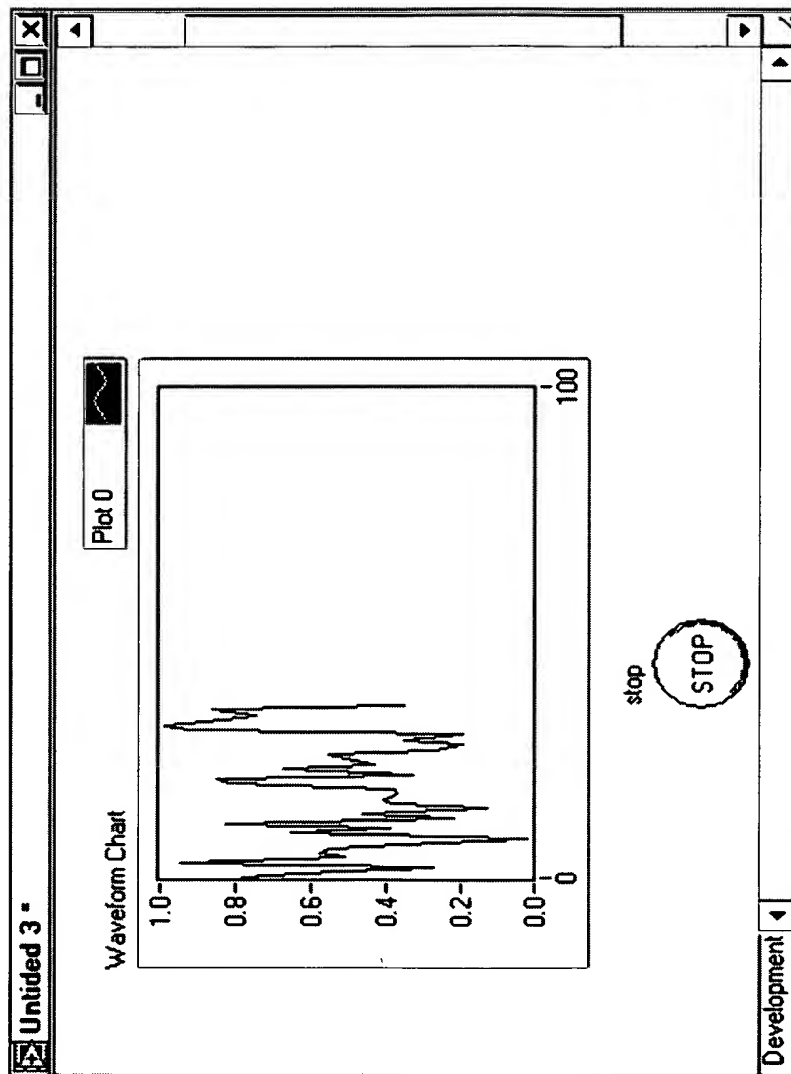


FIG. 42

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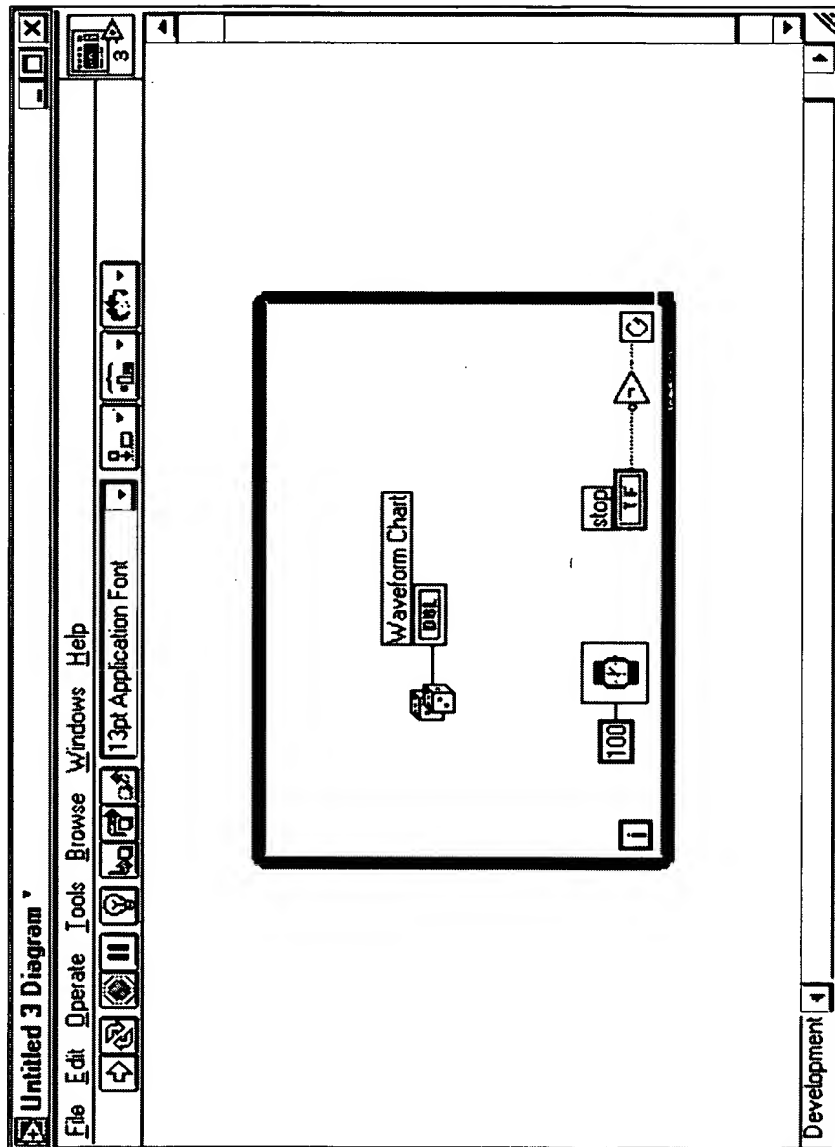


FIG. 43

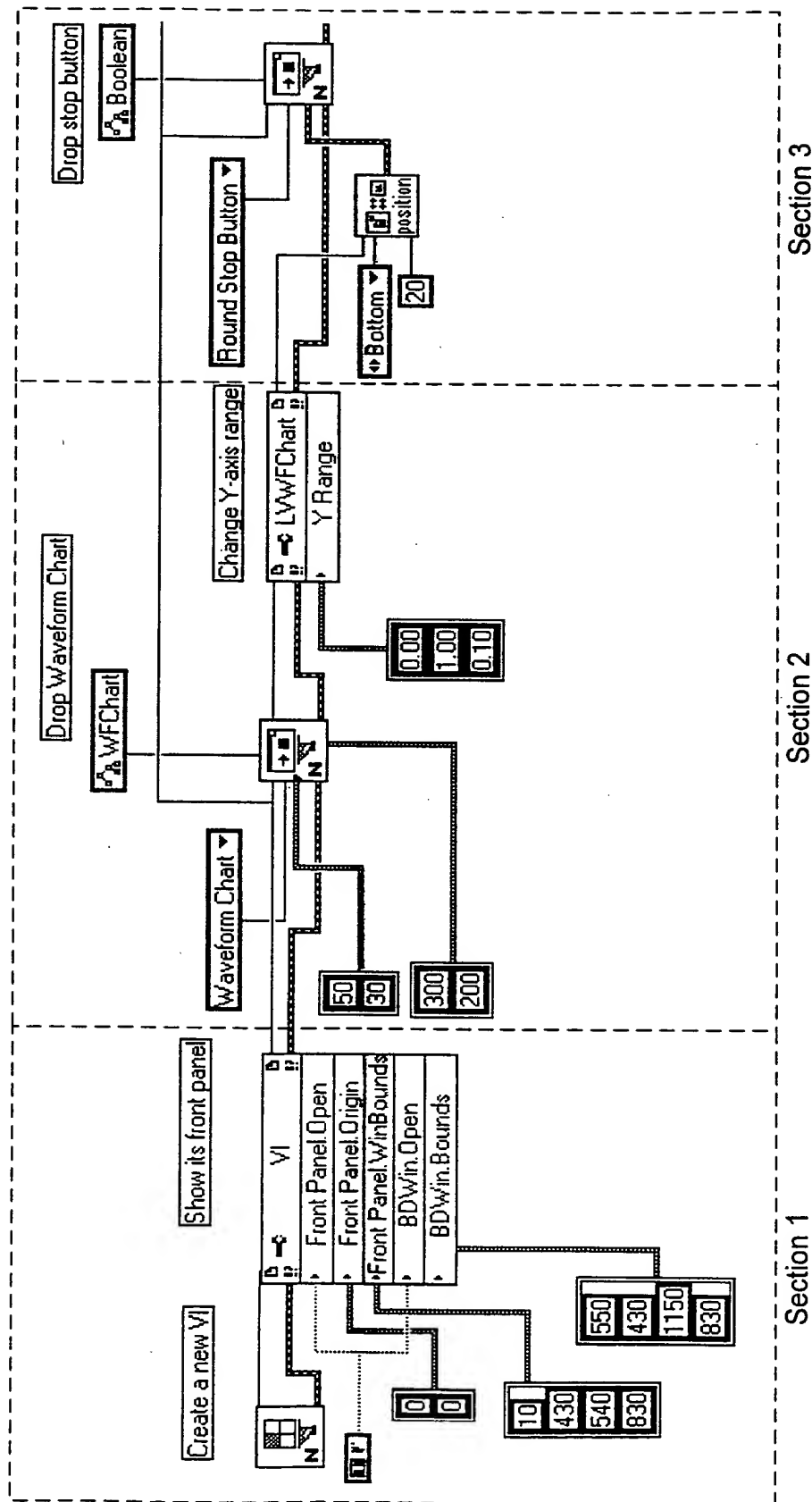


FIG. 44A

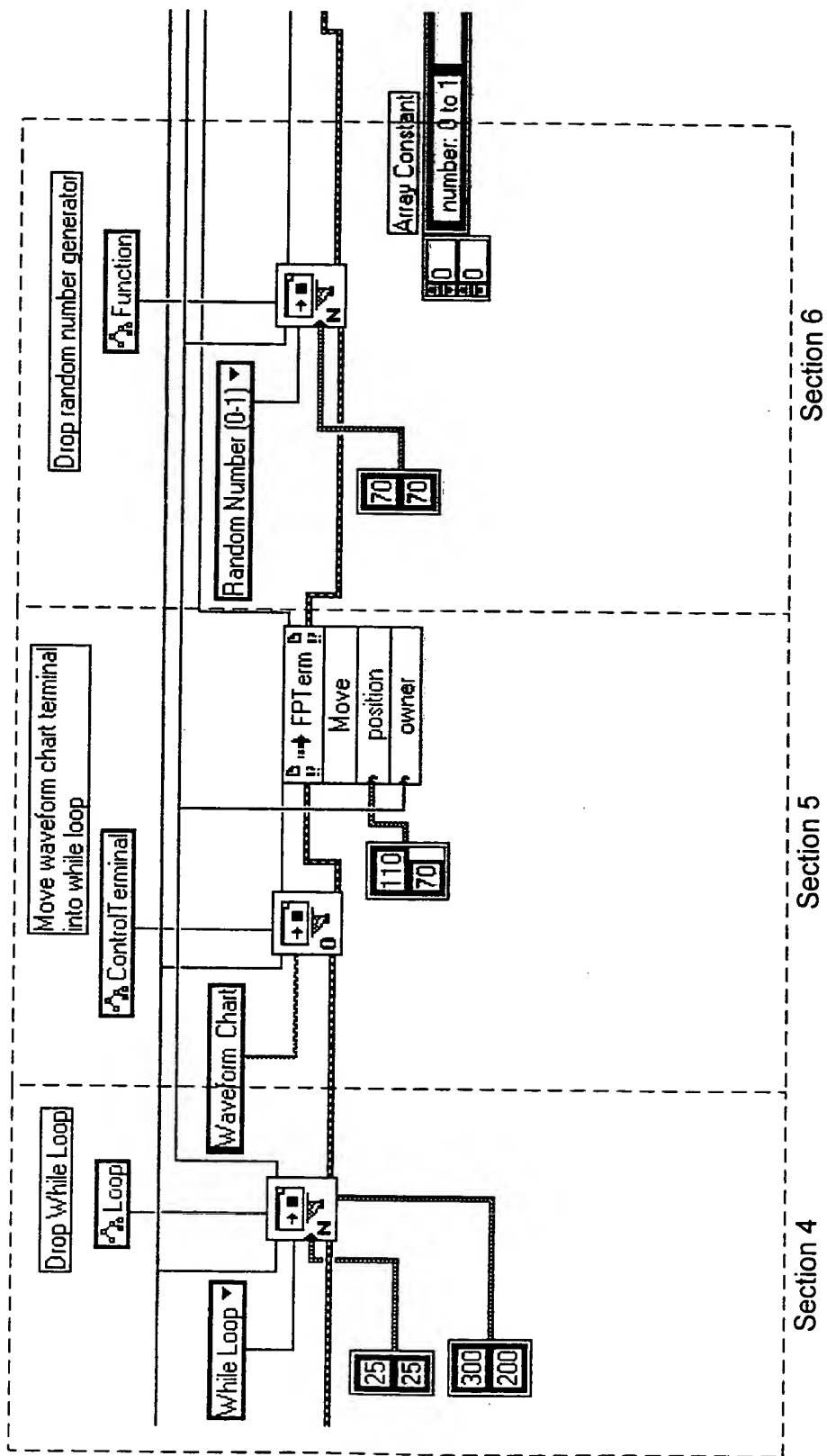


FIG. 44A
(Continued)

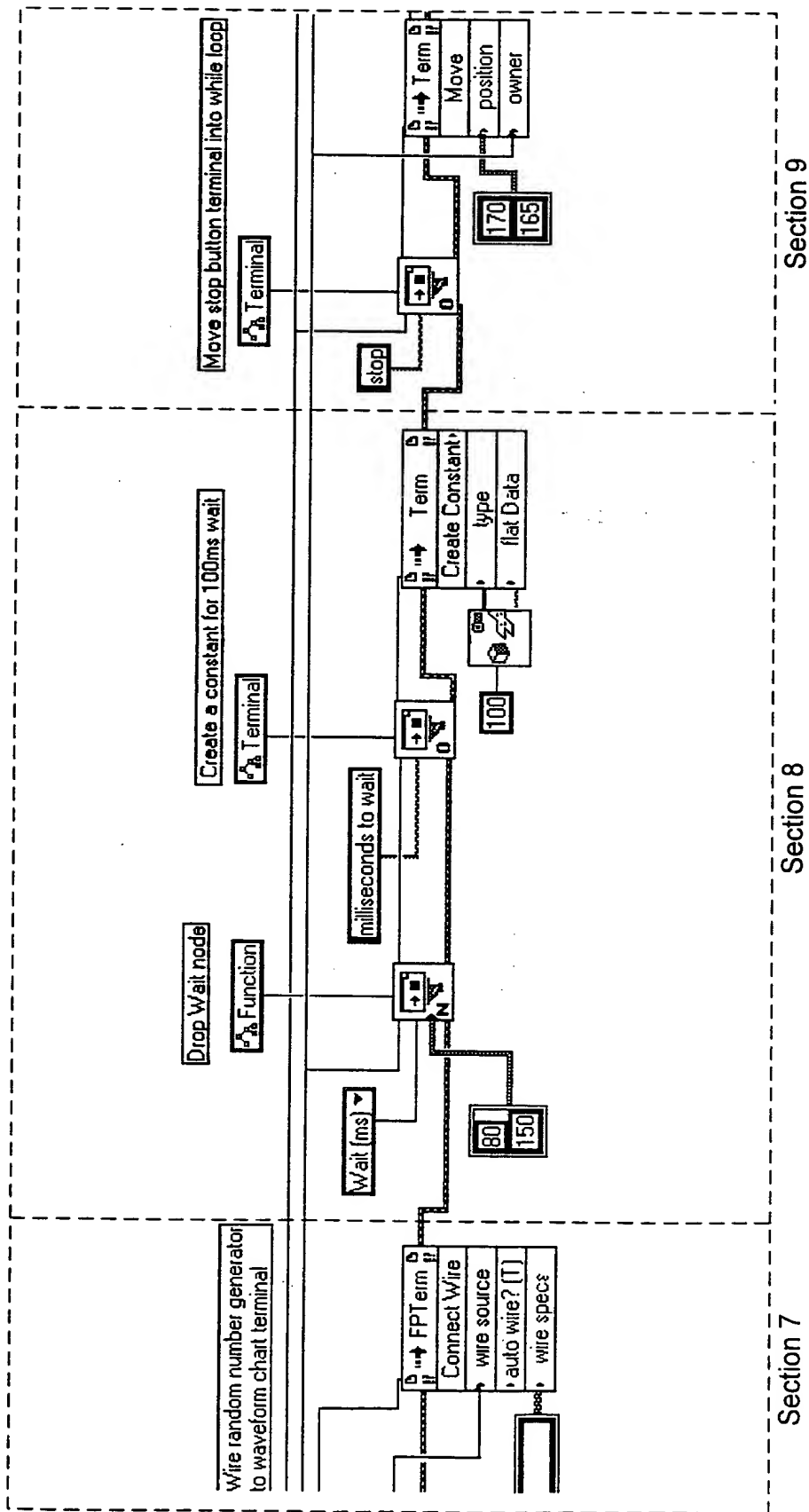


FIG. 44B

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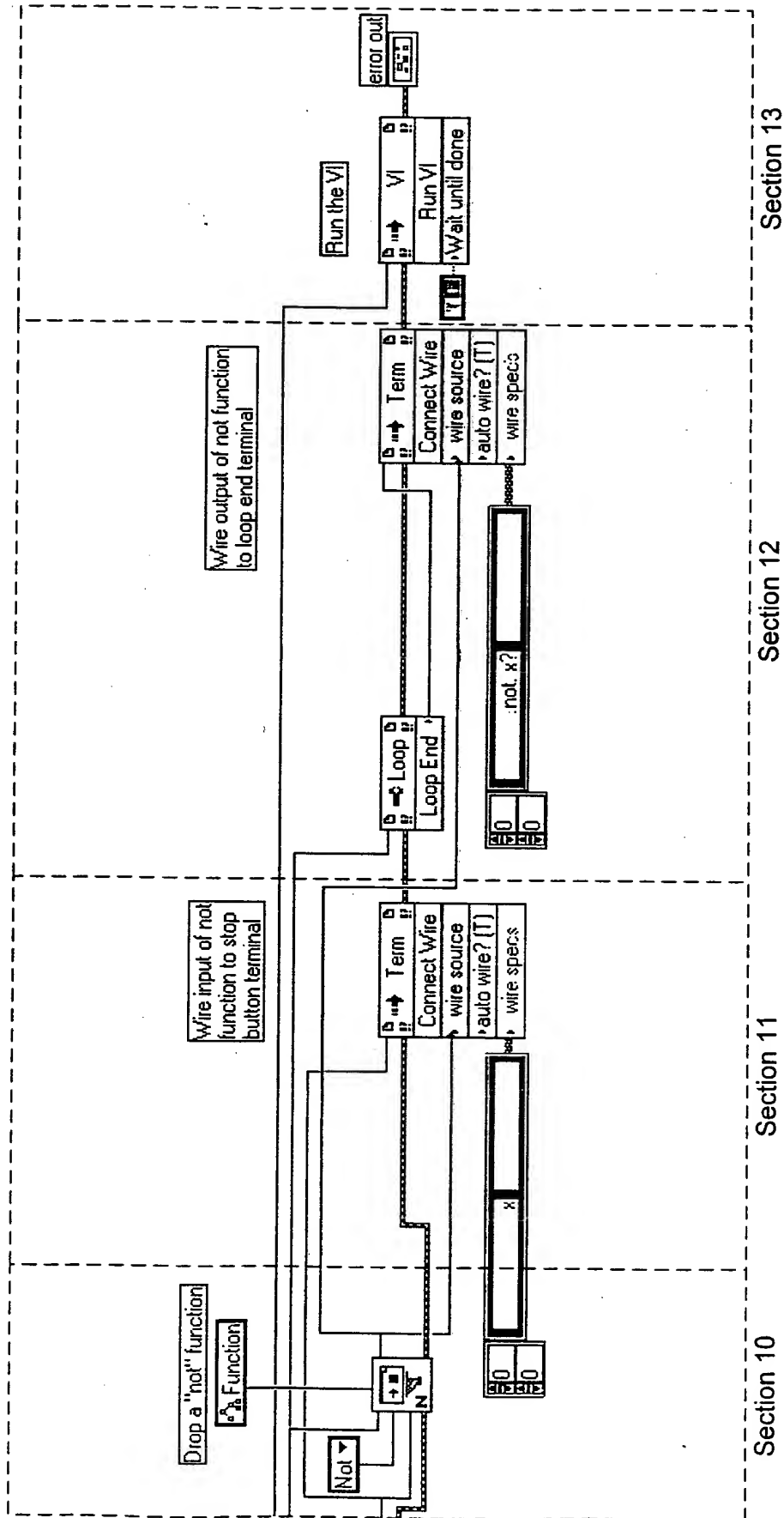


FIG. 44B
 (Continued)



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Server Configuration

Preferences

Server: Configuration

Protocols

☒ TCP/IP Port 5151

☐ ActiveX

Server Resources

☒ VI Calls

☐ VI Methods and Properties

☐ Application Methods and Properties

OK Cancel

FIG. 45

Exported VIs Configuration

Preferences

Server: Exported VIs

Exported VIs

- ✓ c:\labview\server*
- ✓ c:\labview\test**
- ⊗ c:\labview\test\private.vi
- ✓ srvr_*.vi
- ⊗ local_*.vi

c:\labview\server*

☒ Allow Access

☐ Deny Access

Add Remove

OK Cancel

FIG. 46

TCP/IP Access Configuration

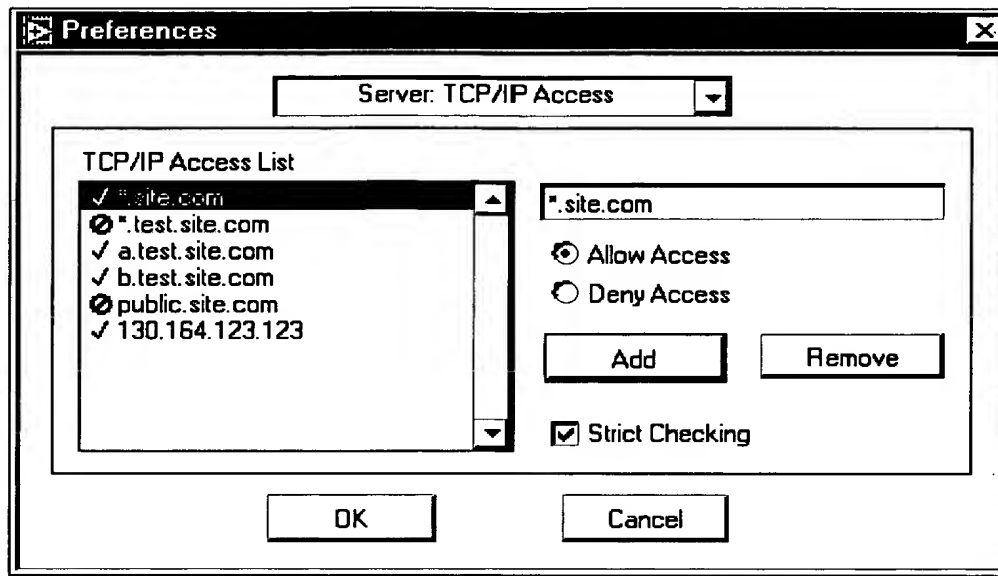


FIG. 47

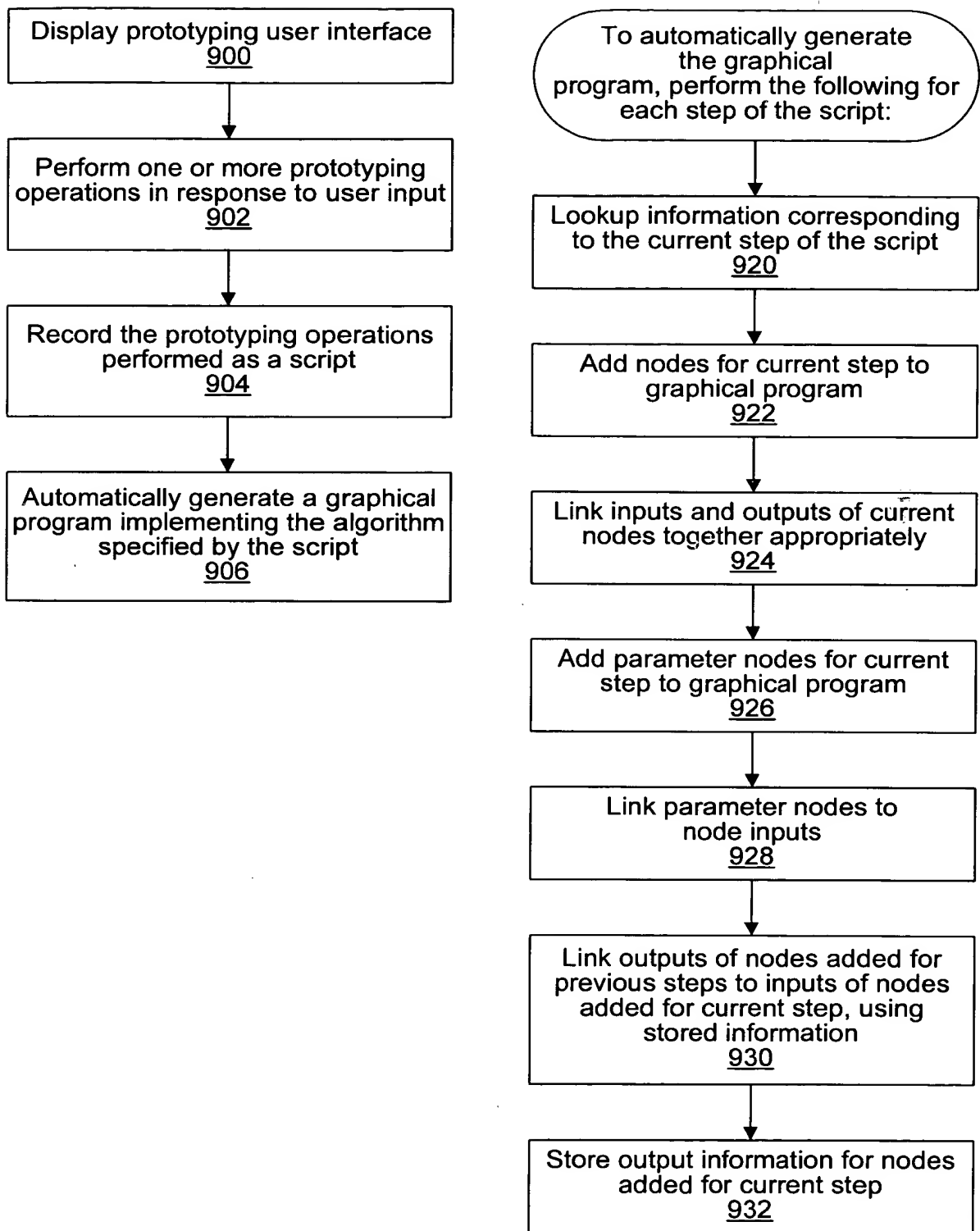


FIG. 48